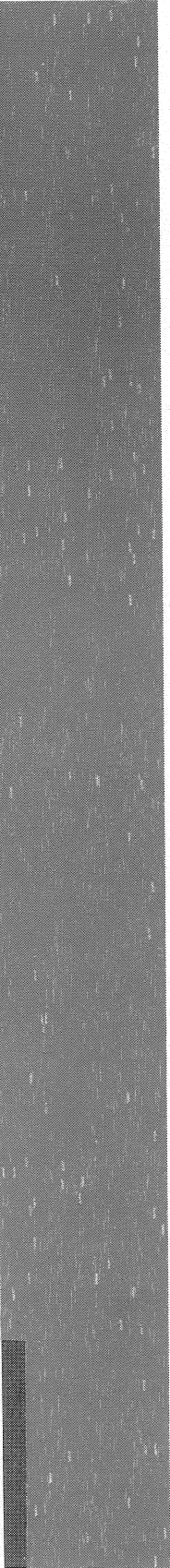


REPORT

SUBSTANCE ABUSE TREATMENT FOR FEMALE DASA CLIENTS

**Treatments, Birth Outcomes,
and Demographic Profiles**

**Washington State
Department of
Social and Health Services
Planning, Research &
Development
Office of Research &
Data Analysis**



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Laura Schrager, M.A.
Frank Kenny, B.S.
Laurie Cawthon, M.D., M.P.H.

First Steps Database
Office of Research and Data Analysis
Planning, Research and Development
Department of Social and Health Services
Olympia, Washington 98504-5204

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DEPARTMENT OF SOCIAL AND HEALTH SERVICES

Jean Soliz, Secretary

DIVISION OF PLANNING, RESEARCH AND DEVELOPMENT

Joseph G. Bell, Ph.D, Director

OFFICE OF RESEARCH AND DATA ANALYSIS

Timothy R. Brown, Ph.D, Chief

In Conjunction with
DEPARTMENT OF HEALTH

Bruce Miyahara, Secretary

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EXECUTIVE SUMMARY

In 1989 the State of Washington enacted the Omnibus Drug Act expanding the eligibility requirements for pregnant and postpartum women for substance abuse treatment services to 185% of the Federal Poverty Level and giving substance abusing pregnant and postpartum women priority for receiving treatment services. This report describes the basic demographics, birth outcomes, prenatal care and Medicaid payments for substance abusing pregnant and postpartum women. Analyses were based on linked data from two major databases maintained by the State of Washington: the First Steps Database containing information from Medicaid claims and birth certificates on demographic characteristics, prenatal care, Medicaid-paid medical care, and birth outcomes for all Washington residents giving birth since July 1, 1988; and the Substance Abuse Management System containing information on demographic characteristics and substance abuse treatment for publicly-funded treatment services.

This report presents information on three overlapping populations:

Statewide Births. Women who gave birth in the year July 1, 1990 through June 30, 1991.

DASA Clients with Completed Pregnancies. Women who received substance abuse treatment services (during the year July 1, 1990 through June 30, 1991) while they were pregnant or postpartum and whose infants' date of delivery could be determined.

Female DASA Clients. Women who received DASA-funded treatment services in the year July 1, 1990 through June 30, 1991.

The identification of these groups facilitated a number of different studies within this report:

- comparison of the birth outcomes, prenatal care and medical care payments for women with DASA-funded substance abuse treatment to other women who gave birth;
- presentation of birth outcomes, prenatal care and medical care payments for a group of treated substance abusing pregnant and postpartum women by the trimester treatment began; and
- comparison of the characteristics of pregnant or postpartum women who received DASA-funded treatment services to non-pregnant, non-postpartum women who received such services.

MAJOR FINDINGS

Substance Abuse and Birth Outcomes

- The rate of low birthweight (LBW) for infants of women who received DASA-funded substance abuse treatment in the prenatal period (8.7%) was lower than that for women with identified but untreated substance abuse problems (12.9%) and for women who first received treatment in the postpartum period (13.9%). The rate of LBW was higher for all three of these groups of identified substance abusers than for other Medicaid women (5.3%) and for non-Medicaid women (3.3%).

Substance Abuse and Medicaid Payments

- Average Medicaid payments for substance abuse treatment for pregnant women with Medicaid-paid substance abuse treatment in the prenatal period were \$1,343. This amount excludes DASA payments made through reimbursement systems other than Medicaid.
- Average Medicaid payments for maternal medical care (excluding substance abuse treatment payments) for women who received DASA-funded substance abuse treatment in the prenatal period (\$5,597) were higher than those for women with identified but untreated substance abuse problems (\$5,104) and for women who first received treatment in the postpartum period (\$4,559). Medicaid payments for maternal medical care for these groups of identified substance abusers were \$850 to \$1,850 higher than those for other Medicaid women (\$3,707).
- Average Medicaid payments for medical care in the first year of life for the infants of women who received DASA-funded substance abuse treatment in the prenatal period (\$2,986) were lower than those for infants of women with identified but untreated substance abuse problems (\$3,343) and for infants of women who first received treatment in the postpartum period (\$4,123). Medicaid payments for medical care for infants of identified substance abusers were \$800 to \$1,900 greater than those for infants of Medicaid women who were not identified as substance abusers (\$2,190).

Substance Abuse, Pregnancy and Entry Into Treatment

- Approximately half (49.8%) of the women who received DASA-funded substance abuse treatment while they were pregnant began treatment in the first trimester of their pregnancy.

Substance Abuse and Maternal Characteristics

- The rate of smoking among pregnant women identified as substance abusers was approximately 50%, almost twice the rate among pregnant Medicaid women not identified as substance abusers (27%) and more than four times the rate of smoking among non-Medicaid pregnant women (11%).
- Approximately 75% of pregnant women identified as substance abusers were unmarried, compared to about 50% of Medicaid pregnant women who were not identified as substance abusers and less than 10% of non-Medicaid pregnant women.

Characteristics of Female DASA Clients

- Approximately 15% of women who received DASA-funded substance abuse treatment either were pregnant or had delivered a child within the previous year.
- Approximately 40% of women who were pregnant or postpartum (PPW) and received DASA-funded substance abuse treatment were less than 25 years of age, compared to 27% of non-PPW women. Less than 10% of women who were pregnant or postpartum (PPW) and received DASA-funded substance abuse treatment were 35 years of age or older, compared to 37% of non-PPW women.
- Alcohol was the primary drug of choice of approximately two-thirds (67%) of non-PPW women, compared to less than half (45%) of PPW women. The trend among PPW women was towards cocaine as a first drug of choice, with 29% of PPW having cocaine as a primary drug of choice compared to 13% for non-PPW women.

INTRODUCTION

In 1989 the State of Washington enacted the Omnibus Drug Act. This legislation had two major functions: (1) expanding the eligibility requirements for pregnant and postpartum women for substance abuse treatment services to 185% of the Federal Poverty Level; and (2) giving substance abusing pregnant and postpartum women priority for receiving treatment services. This report describes the characteristics of women who received treatment services funded by the Division of Alcohol and Substance Abuse (DASA). Particular attention is focused on the characteristics of substance abusing pregnant and postpartum women (PPW).

STUDY GROUPS

This study reports findings about three overlapping populations:

Statewide Births. The demographic characteristics, birth outcomes, prenatal care, and Medicaid payments for women who received DASA-funded treatment are compared to all other women who gave birth in the year July 1, 1990 through June 30, 1991. Specifically, women who received DASA-funded substance abuse treatment services are compared to three other groups: (a) identified substance abusers who did not receive DASA-funded treatment; (b) women not identified as substance abusers but who had Medicaid-paid prenatal or delivery services; and (c) women who did not have Medicaid-paid maternity services and were not identified as substance abusers. Women who received DASA-funded services were divided according to whether they began treatment in the prenatal or postpartum period.

DASA Clients with Completed Pregnancies. Birth outcomes, prenatal care, Medicaid payments, and demographic characteristics of pregnant and postpartum women who received DASA-funded treatment are presented by the trimester when treatment began. Treatment paths taken by pregnant and postpartum women during their prenatal and postpartum period are described.

Female DASA Clients. The basic demographic and treatment characteristics of pregnant and postpartum women who received DASA-funded services are compared to non-pregnant, non-postpartum women who received DASA-funded services. Demographic characteristics are presented for four major ethnic groups and for women who received each of six major treatment modalities (intensive inpatient, intensive outpatient, outpatient, detox, long-term care and methadone). The characteristics of pregnant and postpartum women who received treatment at specialized facilities and at non-specialized facilities are compared for three modalities: intensive inpatient, intensive outpatient, and outpatient treatment.

DATA SOURCES

This report relies on information from two databases in the Department of Social and Health Services (DSHS): the Substance Abuse Management System, maintained by the Division of Alcohol and Substance Abuse, and the First Steps Database, maintained by the Office of Research and Data Analysis.

The Substance Abuse Management System (SAMS) is the data collection system used by the Division of Alcohol and Substance Abuse (DASA). SAMS includes reports of publicly funded treatment services for substance abusers in Washington State. SAMS contains admission, service provision, demographic and discharge data from 200 treatment agencies across the state. Appendix A describes the variables and source files from SAMS used in this report. Appendix B explains how women in SAMS were unduplicated. Appendix C describes how pregnancy status and pregnancy spans were determined in SAMS.

The First Steps Database provides a single repository for data elements from different source files (birth certificates, infant death certificates, maternal and infant services paid by Medicaid, and Medicaid eligibility history). Birth certificates provided by the Center for Health Statistics of the Department of Health contain data on prenatal care, pregnancy outcomes, and background information for all births to Washington State residents. The First Steps Database links birth certificates to Medicaid claims and eligibility. The Medicaid claims contain extensive information on maternal and infant payments, medical care and medical diagnoses. The First Steps Database was developed and is maintained by the Office of Research and Data Analysis (ORDA) in DSHS. Appendix D describes how SAMS and the First Steps Database were linked.

VARIABLES

Race. The mother's race as reported on the birth certificate was used when possible. The terminology and definitions for the races are consistent with those used by the National Center for Health Statistics with one exception (for Hispanic women). The Washington birth certificate includes Hispanic in the list of choices for race, in addition to another question about Hispanic origin or descent. In this study, women were identified as Hispanic if the race was listed as Hispanic, regardless of the response to the Hispanic origin/descent question.

Low Birthweight. Birthweight is a primary indicator of the health of the newborn infant. Low birthweight is associated with increased risk of death and a wide range of disorders, including neuro-developmental conditions, learning disorders, behavior problems, and lower respiratory tract infection (Healthy People 2000, 1991). Newborn infants weighing less than 5.5 pounds (2500 grams) are considered low birthweight (LBW). The rate of LBW was calculated for singleton liveborn infants. Multiple births were excluded because they often have lower birthweights and a set of twins may influence the rate of LBW of small groups.

Maternity Support Services. Maternity Support Services are available to all Medicaid-eligible women throughout pregnancy and 60 days postpartum. These services include childcare, childbirth education, community health worker visits, community health nursing, psychosocial assessment and counseling, and high-risk nutritional services.

Maternity Case Management. Maternity Case Management is targeted to teens (less than 18 years of age), chemically dependent women (or women with the presence of alcohol or drug abuse in their environment), and women with at least three criteria associated with poor maternity outcomes (such as homelessness, lack of a support system, medical factors, education of eighth grade level or less, and entry into prenatal care after 28 weeks). The goal of Maternity Case Management is to identify factors in the woman's life which might adversely affect birth outcomes and to facilitate referrals to needed specialty services.

Medicaid Status and Payments. All women with Medicaid-paid maternity care (prenatal care or delivery) are referred to as Medicaid women. For these women, the total Medicaid payments reported include all payments made by Medicaid for services during nine months of pregnancy and three months of postpartum care. In addition, Medicaid services for the infants' first year of life are reported. Both inpatient and outpatient services are included, and many different types of payments are represented: provider fees for prenatal care, delivery, and postpartum care; hospital charges for delivery services; enhanced prenatal services; and other medical ancillary services (such as transportation, dental care, plus a variety of other services).

The total maternal Medicaid payments were divided into two groups: payments for treatment for chemical dependency and payments for all other medical care. The Medicaid reimbursement system records only some substance abuse treatment costs. Depending on the treatment modality and contractual arrangements with individual providers, payments for chemical dependency treatment may be reimbursed through Medicaid or through other DSHS payment systems (in particular SSPS). For pregnant women, Medicaid generally includes payments for detox, hospital-based intensive inpatient (including medical stabilization), and outpatient treatment. Payments for other types of residential treatment and free-standing intensive inpatient are not generally recorded in Medicaid and so are not included in payments for substance abuse treatment in this report.

Medicaid Eligibility. Women who were eligible for Medicaid at the time of delivery were divided into three groups. Grant Recipient women received Medicaid coverage as well as monthly financial assistance (cash grants). Most of the women in this group received cash grants from Aid to Families with Dependent Children, the Family Independence Program, or a state-funded pregnancy program. Pre-First Steps Medicaid Only women were not eligible to receive grants but were eligible for Medicaid services as Medically Needy, Medically Indigent, or Categorically Needy under SOBRA 86 legislation. In general, women in this group had incomes below 90% of the Federal Poverty Level. First Steps Expansion women were eligible for Medicaid under the expansion of Medicaid coverage to pregnant women with incomes below 185% of the Federal Poverty Level. This expansion, commonly known as First Steps, was implemented in August 1989. (See Cawthon et al., 1992, for more detail.)

LIMITATIONS

There are significant limitations in the methodology which was used to identify substance abusers in this report. In order to be identified as a substance abuser, a woman had to either have a Medicaid medical diagnosis of substance abuse or have substance abuse treatment recorded in SAMS or the First Steps Database. This methodology has four major limitations for the identification of substance abusers: (1) information was only available on substance abuse treatment recorded in SAMS or the First Steps Database and especially prior to July 1, 1990, the reporting of substance abuse treatment in SAMS was suspected to be incomplete; (2) treatment that was not publicly supported is unlikely to be recorded in either of these databases; (3) an unknown number of Medicaid women will have substance abuse problems and not receive substance abuse diagnoses on their Medicaid claims; and (4) non-Medicaid women could not be identified using medical diagnoses (because substance abuse medical diagnoses were only available for women with Medicaid-paid medical claims) and seldom received publicly-funded substance abuse treatment (and thus had no substance abuse treatment recorded in SAMS or the First Steps Database). Because of this last limitation, few substance abusing non-Medicaid women were identified in this report.

There is a significant bias affecting the identification of substance abusers in the immediate postpartum period. Women with poor birth outcomes such as a low birthweight infant are selectively screened for substance abuse in the immediate postpartum period. This is particularly likely for black women. These selection biases contribute to the high rates of low birthweight, high infant payments, and high proportion of black women for substance abusers who began treatment in the immediate postpartum period.

Because of these limitations in the methodology, the observations described in this report may not be generalizable to groups other than those defined in this report. Finally, treatment services funded by DASA for chemical dependency are continually changing over time.

Part 1. Statewide Births: Substance Abuse, Birth Outcomes and Medicaid Payments

The population described in this section is all women who gave birth in the year July 1, 1990 through June 30, 1991. Characteristics of these women are compared according to their identification as substance abusers, their receipt of DASA-funded treatment services, and their receipt of Medicaid funding for prenatal care or delivery. Information on their demographic characteristics, birth outcomes and prenatal care was obtained from the First Steps Database. Additional information was available about Medicaid payments for substance abuse treatment and other medical care for Medicaid women.

Women were identified as substance abusers using both SAMS and the First Steps Database. SAMS was the primary source for data on whether or not a woman received publicly funded substance abuse treatment. The First Steps Database identified women with substance abuse medical diagnoses on their Medicaid claims. The date of delivery from the First Steps Database was used to determine whether treatment began in the prenatal period or the year postpartum.

Of the 78,707 women who gave birth in the targeted year, 1,294 women (1.6%) received publicly-funded substance abuse treatment in their prenatal or postpartum period. A total of 1,269 women had treatment indicated in SAMS, and an additional 25 women had hospital-based intensive inpatient treatment recorded only in the First Steps Database. These 1,294 women were grouped according to whether their substance abuse treatment began in the prenatal or postpartum period. In addition, the First Steps Database identified a group of Medicaid women with substance abuse medical diagnoses. Of the 1,545 women with medical diagnoses for substance abuse on Medicaid claims, 722 did not receive publicly-funded substance abuse treatment. (See Appendix E for a list of medical diagnoses.)

Women who gave birth in July 1990 - June 1991 were assigned to one of five groups:

Identified Substance Abusers: DASA-Funded Services Began Prenatal. Women who received DASA-funded treatment services in the prenatal period (N=834);

Identified Substance Abusers: DASA-Funded Services Began Postpartum. Women who first received DASA-funded treatment services in the postpartum period (N=460);

Identified Substance Abusers: No DASA-Funded Services. Women identified as substance abusers in the First Steps Database who did not receive DASA-funded treatment services (N=722);

Other Medicaid Women. Women with Medicaid payments for maternity services who were not identified as substance abusers (N=25,414); and

Non-Medicaid Women. Women with no Medicaid payments for maternity services who were not identified as substance abusers (N=51,277).

TABLE 1.1

**DEMOGRAPHIC CHARACTERISTICS OF WOMEN GIVING BIRTH IN 7/1/90 - 6/30/91
BY RECEIPT OF DASA SERVICES, IDENTIFICATION OF SUBSTANCE ABUSE
AND MEDICAID STATUS**

	IDENTIFIED SUBSTANCE ABUSERS			
	DASA SERVICES BEGAN PRENATAL (N=834)	DASA SERVICES BEGAN POSTPARTUM (N=460)	NO DASA SERVICES (N=722)	OTHER MEDICAID WOMEN (N=25414)
RACE				NON- MEDICAID WOMEN (N=51277)
White	590 (70.7%)	302 (65.7%)	502 (69.5%)	16934 (66.6%)
Hispanic	28 (3.4%)	13 (2.8%)	31 (4.3%)	4234 (16.7%)
Black	112 (13.4%)	80 (17.4%)	90 (12.5%)	1357 (5.3%)
American Indian	63 (7.6%)	48 (10.4%)	56 (7.8%)	1084 (4.3%)
Asian	10 (1.2%)	0 (0.0%)	8 (1.1%)	1246 (4.9%)
Other or Unknown	31 (3.7%)	17 (3.7%)	35 (4.9%)	559 (2.2%)
AGE				
<20	154 (18.5%)	101 (22.0%)	151 (20.9%)	6117 (24.1%)
20-24	257 (30.8%)	138 (30.0%)	252 (34.9%)	9816 (38.6%)
25-29	239 (28.7%)	123 (26.7%)	177 (24.5%)	5467 (21.5%)
30-34	144 (17.3%)	71 (15.4%)	105 (14.5%)	2836 (11.2%)
35-39	37 (4.4%)	25 (5.4%)	34 (4.7%)	971 (3.8%)
40+	3 (0.4%)	2 (0.4%)	3 (0.4%)	199 (0.8%)
Missing	0	0	0	8
MARITAL STATUS				
Married	211 (25.3%)	107 (23.3%)	161 (22.3%)	12153 (47.8%)
Single	615 (73.7%)	347 (75.4%)	556 (77.0%)	13126 (51.7%)
Unknown	8 (1.0%)	6 (1.3%)	5 (0.7%)	135 (0.5%)
				46533 (90.8%)
				4494 (8.8%)
				250 (0.5%)

TABLE 1.1: FINDINGS

- The proportion of white women among identified substance abusers (65.7% to 70.7%) was approximately the same as that among Medicaid women who were not identified as substance abusers (66.6%).
- The proportion of Hispanic women was much lower among identified substance abusers (less than 5%) than among Medicaid women who were not identified as substance abusers (more than 15%).
- The proportion of black women was much higher among identified substance abusers (12.5 to 17.4%) than among Medicaid women who were not identified as substance abusers (5.3%).
- The proportion of American Indian women was much higher among identified substance abusers (7.6 to 10.4%) than among Medicaid women who were not identified as substance abusers (4.3%).
- Approximately 75% of women identified as substance abusers were unmarried, compared to about 50% of Medicaid women who were not identified as substance abusers and less than 10% of non-Medicaid women.

TABLE 1.2

**PRENATAL CARE AND BIRTH OUTCOMES OF WOMEN GIVING BIRTH IN 7/1/90 - 6/30/91
BY RECEIPT OF DASA SERVICES, IDENTIFICATION OF SUBSTANCE ABUSE
AND MEDICAID STATUS**

	IDENTIFIED SUBSTANCE ABUSERS				NON- MEDICAID WOMEN (N=51277)
	DASA SERVICES BEGAN PRENATAL (N=834)	DASA SERVICES BEGAN POSTPARTUM (N=460)	NO DASA SERVICES (N=722)	OTHER MEDICAID WOMEN (N=25414)	
SMOKING					
Yes	428 (51.3%)	240 (52.2%)	335 (46.4%)	6855 (27.0%)	5799 (11.3%)
No	198 (23.7%)	100 (21.7%)	139 (19.3%)	14578 (57.4%)	39693 (77.4%)
Unknown	208 (24.9%)	120 (26.1%)	248 (34.4%)	3981 (15.7%)	5785 (11.3%)
TRIMESTER PRENATAL CARE BEGAN					
First	473 (56.7%)	200 (43.5%)	329 (45.6%)	14684 (57.8%)	43152 (84.2%)
Second	237 (28.4%)	145 (31.5%)	220 (30.5%)	7261 (28.6%)	5083 (9.9%)
Third	47 (5.6%)	38 (8.3%)	57 (7.9%)	1835 (7.2%)	783 (1.5%)
None or Unknown	77 (9.2%)	77 (16.7%)	116 (16.1%)	1634 (6.4%)	2259 (4.4%)
LOW BIRTHWEIGHT (singleton liveborn)	71 (8.7%)	62 (13.9%)	90 (12.9%)	1326 (5.3%)	1684 (3.3%)
MEDICAID WOMEN*	767 (92.0%)	416 (90.4%)	707 (97.9%)	25414 (100.0%)	0 (0.0%)

*Medicaid women either received Medicaid-paid prenatal care and/or had a Medicaid-paid delivery.

TABLE 1.2: FINDINGS

- The rate of smoking among women identified as substance abusers was approximately 50%, almost twice the rate among Medicaid women not identified as substance abusers (27%) and more than four times the rate of smoking among non-Medicaid women (11%).
- The rate of low birthweight (LBW) for infants of women who received DASA-funded substance abuse treatment in the prenatal period (8.7%) was lower than that for women with identified but untreated substance abuse problems (12.9%) and for women who first received treatment in the postpartum period (13.9%). The rate of LBW was higher for all three of these groups of identified substance abusers than for other Medicaid women (5.3%) or for non-Medicaid women (3.3%).
- More than 90% of identified substance abusers were Medicaid women, i.e., had Medicaid-paid prenatal care or delivery. (See the section on Limitations in the Introduction for a discussion of constraints on our ability to identify non-Medicaid substance abusers.)

TABLE 1.3

**ENHANCED PRENATAL SERVICES AND MEDICAID PAYMENTS FOR MEDICAID WOMEN GIVING BIRTH IN
7/1/90 - 6/30/91 BY RECEIPT OF DASA SERVICES AND IDENTIFICATION OF SUBSTANCE ABUSE**

	IDENTIFIED SUBSTANCE ABUSERS				OTHER MEDICAID WOMEN (N=25,414)
	DASA SERVICES BEGAN PRENATAL (N=767)	DASA SERVICES BEGAN POSTPARTUM (N=416)	NO DASA SERVICES (N=707)		
MEDICAID WOMEN (NOTE 1)	767 (100.0%)	416 (100.0%)	707 (100.0%)		25414 (100.0%)
MATERNITY CASE MANAGEMENT (MCM)					
MCM in First Trimester	53 (6.9%)	18 (4.3%)	41 (5.8%)		520 (2.0%)
MCM in Second Trimester	161 (21.0%)	49 (11.8%)	89 (12.6%)		1480 (5.8%)
MCM in Third Trimester	139 (18.1%)	57 (13.7%)	98 (13.9%)		1653 (6.5%)
No MCM	414 (54.0%)	292 (70.2%)	479 (67.8%)		21761 (85.6%)
MATERNITY SUPPORT SERVICES (MSS)					
MSS in First Trimester	106 (13.8%)	35 (8.4%)	89 (12.6%)		2482 (9.8%)
MSS in Second Trimester	230 (30.0%)	83 (20.0%)	180 (25.5%)		4607 (18.1%)
MSS in Third Trimester	164 (21.4%)	93 (22.4%)	143 (20.2%)		4254 (16.7%)
No MSS	267 (34.8%)	205 (49.3%)	295 (41.7%)		14071 (55.4%)
ELIGIBILITY STATUS FOR MEDICAID (at time of delivery)					
Grant Receipts	629 (82.0%)	338 (81.3%)	540 (76.4%)		12531 (49.3%)
Pre FS Medicaid Only	60 (7.8%)	34 (8.2%)	87 (12.3%)		5036 (19.8%)
FS Expansion Group	64 (8.3%)	36 (8.7%)	73 (10.3%)		7664 (30.2%)
AVERAGE MEDICAID PAYMENTS (NOTE 2)					
Payments for Substance Abuse Treatment (NOTE 3)	556 \$1,343	125 \$235	140 \$91		25414 \$3,707
Payments for Other Maternal Medical Care	767 \$5,597	416 \$4,559	707 \$5,104		24372 \$2,190
Payments for Infant Medical Care (1st year of life) (NOTE 4)	743 \$2,986	398 \$4,123	680 \$3,343		

NOTES:

1. Medicaid women either received Medicaid-paid prenatal care and/or had a Medicaid-paid delivery.
2. Medicaid data are subject to change as claims are paid.
3. Only payments for substance abuse treatment reimbursed through Medicaid are included.
4. Singletons only, no stillbirths.

TABLE 1.3: FINDINGS

- Approximately half (46%) of Medicaid women with substance abuse treatment in the prenatal period received Maternity Case Management (MCM), a much higher proportion than for women who began treatment services postpartum (30%) or who were identified as substance abusers and received no DASA-funded treatment services (32%). In contrast, less than 15% of Medicaid women without an identified substance abuse problem received prenatal MCM. (See page 3 for a description of MCM.)
- More than 65% of Medicaid women with DASA-funded substance abuse treatment in the prenatal period received Maternity Support Services (MSS), a higher proportion than for women who began DASA-funded services postpartum (51%) or who were identified as substance abusers and received no DASA-funded treatment services (58%). Less than 45% of Medicaid women without an identified substance abuse problem received prenatal MSS. (See page 3 for a description of MSS.)
- The proportion of Grant Recipients was higher among Medicaid women identified as substance abusers (76 to 82%) than among Medicaid women without an identified substance abuse problem (49%). (See page 3 for a description of Medicaid eligibility groups.)
- Average Medicaid payments for substance abuse treatment for women with Medicaid-paid substance abuse treatment in the prenatal period were \$1,343. The average payments in the first two months postpartum for women who began treatment in the postpartum period were \$235. The Medicaid payments of \$91 for 140 identified substance abusers who did not receive treatment represent payments for DASA assessments and intake examinations, not treatment services. (These amounts exclude DASA payments made through reimbursement systems other than Medicaid.)
- Average Medicaid payments for maternal medical care (excluding substance abuse treatment payments) for women who received DASA-funded substance abuse treatment in the prenatal period (\$5,597) were higher than those for women with identified but untreated substance abuse problems (\$5,104) or for women who first received treatment in the postpartum period (\$4,559). Medicaid payments for maternal medical care for these groups of identified substance abusers were \$850 to \$1,850 higher than those for other Medicaid women (\$3,707).
- Average Medicaid payments for medical care in the first year of life for the infants of women who received DASA-funded substance abuse treatment in the prenatal period (\$2,986) were lower than those for infants of women with identified but untreated substance abuse problems (\$3,343) or for infants of women who first received treatment in the postpartum period (\$4,123). Medicaid payments for medical care for infants of identified substance abusers were \$800 to \$1,900 greater than those for infants of Medicaid women who were not identified as substance abusers (\$2,190).

Part 2. DASA Clients with Completed Pregnancies

The second population described in this report is all women who received DASA-funded services in the year July 1, 1990 through June 30, 1991 and met two additional criteria: (1) linkage to an infant's birth in the First Steps Database; and (2) receipt of treatment during either the eight months prior to the birth of their child or the year following their child's birth. Of the 12,899 women who received DASA-funded services in the year under study, 1,824 met these additional criteria.

With the infant's date of birth from the First Steps Database as a reference point, the mother's treatment services recorded in SAMS or the First Steps Database were identified for the entire eight months prior to, and one year after, delivery. The first treatment service that each woman received was used to identify the trimester when substance abuse treatment began. A treatment path was constructed for each woman from the first to the last modality received during her entire prenatal period and year postpartum. (See the section on Limitations in the Introduction for a discussion of some constraints that should be considered when looking at the group of substance abusers identified in the immediate postpartum period.)

Tables 2.1 through 2.3 compare the demographic characteristics, prenatal care and birth outcomes of women by the trimester in their pregnancy/postpartum period that substance abuse treatment began. The source of data on prenatal care, Medicaid medical payments and birth outcomes was the First Steps Database. Table 2.4 describes the treatment paths taken by pregnant and postpartum women during the eight months prior to and the year following their infants' birth.

TABLE 2.1

**DEMOGRAPHIC CHARACTERISTICS OF WOMEN GIVING BIRTH AND RECEIVING DASA SERVICES
BY TRIMESTER DASA SERVICES FIRST BEGAN**

	FIRST TRIMESTER (N=619)	SECOND TRIMESTER (N=339)	THIRD TRIMESTER (N=285)	90 DAYS POSTPARTUM (N=204)	91-365 DAYS POSTPARTUM (N=377)
RACE					
White	452 (73.0%)	249 (73.5%)	212 (74.4%)	124 (60.8%)	272 (72.2%)
Hispanic	22 (3.6%)	8 (2.4%)	8 (2.8%)	9 (4.4%)	10 (2.7%)
Black	69 (11.2%)	41 (12.1%)	44 (15.4%)	47 (23.0%)	45 (11.9%)
American Indian	51 (8.2%)	27 (8.0%)	14 (4.9%)	17 (8.3%)	38 (10.1%)
Asian	7 (1.1%)	3 (0.9%)	2 (0.7%)	0 (0.0%)	2 (0.5%)
Other or Unknown	18 (2.9%)	11 (3.2%)	5 (1.8%)	7 (3.4%)	10 (2.7%)
AGE					
<20	115 (18.6%)	52 (15.3%)	48 (16.8%)	31 (15.2%)	87 (23.1%)
20-24	169 (27.3%)	105 (31.0%)	81 (28.4%)	60 (29.4%)	115 (30.6%)
25-29	171 (27.6%)	109 (32.2%)	95 (33.3%)	62 (30.4%)	103 (27.4%)
30-34	134 (21.7%)	53 (15.6%)	42 (14.7%)	44 (21.6%)	51 (13.6%)
35-39	27 (4.4%)	19 (5.6%)	17 (6.0%)	6 (2.9%)	18 (4.8%)
40+	3 (0.5%)	1 (0.3%)	2 (0.7%)	1 (0.5%)	2 (0.5%)
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.0%)
MARITAL STATUS					
Married	167 (27.0%)	78 (23.0%)	65 (22.8%)	50 (24.5%)	92 (24.4%)
Single	452 (73.0%)	261 (77.0%)	220 (77.2%)	154 (75.5%)	285 (75.6%)
EDUCATION					
8 Years or Less	56 (9.1%)	37 (10.9%)	28 (9.8%)	22 (10.8%)	34 (9.0%)
Some High School	283 (45.7%)	139 (41.0%)	125 (43.9%)	81 (39.7%)	181 (48.0%)
High School Graduate	219 (35.4%)	128 (37.8%)	101 (35.4%)	76 (37.3%)	123 (32.6%)
Some College	56 (9.1%)	28 (8.3%)	28 (9.8%)	23 (11.3%)	35 (9.3%)
College Graduate	5 (0.8%)	7 (2.1%)	3 (1.1%)	2 (1.0%)	4 (1.1%)

TABLE 2.1: FINDINGS

- Approximately half (49.8%) of the women who received DASA-funded substance abuse treatment while they were pregnant began treatment in the first trimester of their pregnancy.
- Almost one-quarter (23.0%) of the women first receiving DASA-funded treatment services in the immediate postpartum period were black.¹
- Approximately 45% of women entering DASA-funded substance abuse treatment at any point in their prenatal period or year postpartum were less than 25 years of age.
- Approximately 75% of women receiving DASA-funded substance abuse treatment in the prenatal period or year postpartum were unmarried.
- Approximately 50% of women entering DASA-funded substance abuse treatment during their prenatal or postpartum period were not high school graduates.

¹ There is a significant bias affecting the identification of substance abusers in the immediate postpartum period. Women with poor birth outcomes such as a low birthweight infant are selectively screened for substance abuse in the immediate postpartum period. This is particularly likely for black women. These selection biases contribute to the high proportion of black women in the group of substance abusers who began treatment in the immediate postpartum period.

TABLE 2.2

**SUBSTANCE ABUSE, PRENATAL CARE AND BIRTH OUTCOMES OF WOMEN
GIVING BIRTH AND RECEIVING DASA SERVICES BY TRIMESTER DASA SERVICES FIRST BEGAN**

	FIRST TRIMESTER (N=619)	SECOND TRIMESTER (N=339)	THIRD TRIMESTER (N=285)	90 DAYS POSTPARTUM (N=204)	91-365 DAYS POSTPARTUM (N=377)
DRUG OF CHOICE					
Alcohol	270 (53.2%)	108 (37.4%)	90 (36.3%)	59 (31.2%)	171 (50.3%)
Cocaine	110 (21.7%)	86 (29.8%)	74 (29.8%)	87 (46.0%)	94 (27.7%)
Heroin	61 (12.0%)	37 (12.8%)	33 (13.3%)	8 (4.2%)	9 (2.7%)
Marijuana	45 (8.9%)	37 (12.8%)	35 (14.1%)	23 (12.2%)	36 (10.6%)
Amphetamines	16 (3.2%)	15 (5.2%)	11 (4.4%)	8 (4.2%)	21 (6.2%)
Unknown	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.5%)	1 (0.3%)
Missing	117 (1.2%)	56 (2.1%)	42 (2.0%)	18 (1.6%)	45 (2.3%)
SMOKING HISTORY					
Yes	326 (52.7%)	179 (52.8%)	151 (53.0%)	103 (50.5%)	209 (55.4%)
No	149 (24.1%)	70 (20.7%)	55 (19.3%)	41 (20.1%)	93 (24.7%)
Unknown	144 (23.3%)	90 (26.6%)	79 (27.7%)	60 (29.4%)	75 (19.9%)
PRENATAL CARE BEGAN					
First Trimester	359 (58.0%)	170 (50.2%)	130 (45.6%)	67 (32.8%)	181 (48.0%)
Second Trimester	173 (28.0%)	100 (29.5%)	81 (28.4%)	71 (34.8%)	113 (30.0%)
Third Trimester	29 (4.7%)	31 (9.1%)	32 (11.2%)	21 (10.3%)	33 (8.8%)
None	5 (0.8%)	8 (2.4%)	5 (1.8%)	10 (4.9%)	15 (4.0%)
Unknown	53 (8.6%)	30 (8.9%)	37 (13.0%)	35 (17.2%)	35 (9.3%)
LOW BIRTHWEIGHT INFANTS (singleton liveborn)	61 (10.0%)	32 (9.6%)	35 (12.6%)	45 (22.4%)	49 (13.5%)
FETAL DEATHS	7 *	2	1	1	6
MEDICAID WOMEN	552 (89.2%)	322 (95.0%)	264 (92.6%)	181 (88.7%)	309 (82.0%)

* The primary drug of choice for these 7 women was: cocaine (3), alcohol (2), marijuana (1) and unknown (1).

TABLE 2.2: FINDINGS

- Alcohol was the primary drug of choice for more than 50% of women who entered DASA-funded substance abuse treatment in the first trimester; cocaine was the primary drug of choice for more than 46% of the women first entering DASA-funded substance abuse treatment in the immediate postpartum period.
- Approximately half of all women who received DASA-funded substance abuse treatment when they were pregnant or postpartum were smokers.
- Almost 60% of women entering into DASA-funded substance abuse treatment in their first trimester also began prenatal care in their first trimester, compared to 46-50% for women entering treatment in their second or third trimester. Only 33% of women entering into DASA-funded substance abuse treatment in the immediate postpartum period started prenatal care in their first trimester.
- The rate of low birthweight (LBW) for infants of women who began DASA-funded substance abuse treatment in their first or second trimester (10.0% and 9.6%) was slightly lower than that for women who first received DASA-funded substance abuse treatment in their third trimester (12.6%) or began after 90 days postpartum (13.5%). The rate of LBW for all of these groups was lower than that for women entering into substance abuse treatment in the immediate 90 days postpartum (22.4%).²

² There is a significant bias affecting the identification of substance abusers in the immediate postpartum period. Women with poor birth outcomes such as a low birthweight infant are selectively screened for substance abuse in the immediate postpartum period. This is particularly likely for black women. These selection biases contribute to the high rates of low birthweight in the group of substance abusers who began treatment in the immediate postpartum period.

TABLE 2.3

**ENHANCED PRENATAL SERVICES AND MEDICAID PAYMENTS FOR MEDICAID WOMEN
GIVING BIRTH AND RECEIVING DASA SERVICES BY TRIMESTER DASA SERVICES FIRST BEGAN**

	FIRST TRIMESTER (N=552)	SECOND TRIMESTER (N=322)	THIRD TRIMESTER (N=264)	90 DAYS POSTPARTUM (N=181)	91-365 DAYS POSTPARTUM (N=309)
MEDICAID WOMEN (NOTE 1)	552 (100.0%)	322 (100.0%)	264 (100.0%)	181 (100.0%)	309 (100.0%)
MATERNITY CASE MANAGEMENT (MCM)					
MCM in First Trimester	47 (8.5%)	24 (7.5%)	5 (1.9%)	5 (2.8%)	4 (1.3%)
MCM in Second Trimester	107 (19.4%)	100 (31.1%)	34 (12.9%)	8 (4.4%)	18 (5.8%)
MCM in Third Trimester	71 (12.9%)	56 (17.4%)	86 (32.6%)	33 (18.2%)	17 (5.5%)
No Prenatal MCM	327 (59.2%)	142 (44.1%)	139 (52.7%)	135 (74.6%)	270 (87.4%)
MATERNITY SUPPORT SERVICES (MSS)					
MSS in First Trimester	97 (17.6%)	48 (14.9%)	11 (4.2%)	9 (5.0%)	8 (2.6%)
MSS in Second Trimester	154 (27.9%)	98 (30.4%)	67 (25.4%)	27 (14.9%)	39 (12.6%)
MSS in Third Trimester	94 (17.0%)	61 (18.9%)	78 (29.6%)	46 (25.4%)	41 (13.3%)
No Prenatal MSS	207 (37.5%)	115 (35.7%)	108 (40.9%)	99 (54.7%)	221 (71.5%)
AVERAGE MEDICAID PAYMENTS (NOTE 2)					
Payments for Substance Abuse Treatment (NOTE 3)	345 \$958	263 \$1,078	213 \$1,029	92 \$219	28 \$111
Payments for Maternal Medical Care	552 \$5,715	322 \$6,015	264 \$6,161	181 \$4,253	309 \$3,755
Payments for Infant Medical Care (1st year of life) (NOTE 4)	533 \$3,073	314 \$3,146	257 \$3,308	176 \$5,411	297 \$2,794

NOTES:

1. Medicaid women either received Medicaid-paid prenatal care and/or had a Medicaid-paid delivery.
2. Medicaid data are subject to change as claims are paid.
3. Only payments for substance abuse treatment reimbursed through Medicaid are included.
4. Singletons only, no stillbirths.

TABLE 2.3: FINDINGS

- Approximately half (41-56%) of the Medicaid women with DASA-funded substance abuse treatment in the prenatal period received Maternity Case Management (MCM) in the prenatal period, a much higher proportion than for women who began DASA-funded services postpartum (13-25%). (See page 3 for a description of MCM.)
- More than 65% of the Medicaid women with DASA-funded substance abuse treatment in the prenatal period received Maternity Support Services (MSS) in the prenatal period, a much higher proportion than for women who began DASA-funded services in the immediate (45%) or the later (28%) postpartum period. (See page 3 for a description of MSS.)
- Average Medicaid payments for substance abuse treatment for women with Medicaid-paid substance abuse treatment in the prenatal period were approximately \$1,000. The average payments in the first two months postpartum for women who began treatment in the immediate postpartum period were \$219.
- Average Medicaid payments for maternal medical care (excluding any substance abuse treatment payments) for women who began DASA-funded substance abuse treatment in the first trimester (\$5,715) were lower than those for women who began treatment in the second trimester (\$6,015) or the third trimester (\$6,161). Medicaid payments for maternal medical care for all of these groups of women with substance abuse treatment in the prenatal period were higher than those for women who began substance abuse treatment postpartum (\$3,755 to \$4,253).
- Average Medicaid payments for medical care in the first year of life for the infants of women with substance abuse treatment in the first trimester (\$3,073) were lower than those for women who began treatment in the second trimester (\$3,146) or the third trimester (\$3,308). Average Medicaid payments for infant medical care for all of these groups of women who began DASA-funded substance abuse treatment in the prenatal period were much lower than those for the infants of women who began substance abuse treatment in the immediate postpartum period (\$5,411) and were higher than those for the infants of women who began substance abuse treatment in the later postpartum period (\$2,794).

TABLE 2.4

TREATMENT PATHS TAKEN BY WOMEN
IN THEIR PRENATAL AND POSTPARTUM PERIOD
(N = 1824)

	N	PERCENT
FIRST MODALITY RECEIVED		
Intensive Inpatient	217	(11.9%)
Intensive Outpatient	458	(25.1%)
Long-term Care	93	(5.1%)
Detox	54	(3.0%)
Outpatient	892	(48.9%)
Methadone	110	(6.0%)
NUMBER OF DIFFERENT MODALITIES RECEIVED		
One	1214	(66.6%)
Two	395	(21.7%)
Three	154	(8.4%)
Four or More	61	(3.3%)
NUMBER RECEIVING ONLY ONE MODALITY (N=1214)		
Intensive Inpatient	52	(4.3%)
Intensive Outpatient	308	(25.4%)
Long-term Care	32	(2.6%)
Detox	17	(1.4%)
Outpatient	723	(59.6%)
Methadone	82	(6.8%)

TABLE 2.4: FINDINGS

- Almost half of all pregnant and postpartum women (PPW) started their treatment in outpatient.
- Two-thirds of all PPW women received only one modality of treatment during pregnancy and the year after delivery.
- Treatment paths taken by PPW women who received treatment in more than one modality were numerous and complex. (See Appendix G for a complete listing of treatment paths taken by 1824 women during their prenatal or postpartum period.)

Part 3. Female DASA Clients

The third population described in this report is all women who received DASA-funded treatment services in the period July 1, 1990 through June 30, 1991. A total of 12,899 women received DASA-funded services in that year period. SAMS provided information on treatment in the targeted year as well as basic demographic data on these women. Their prenatal or postpartum status was determined using both SAMS and the First Steps Database. For a woman to be identified as pregnant or postpartum (PPW), she had to have received treatment services while she was pregnant or postpartum. Of the 12,899 women who received DASA-funded treatment in the year July 1, 1990 through June 30, 1991, a total of 2,009 (15.6%) received DASA-funded services when they were either pregnant or postpartum.³

The next three sections describe this population of women. Section 3A compares the demographic characteristics of PPW to non-PPW women receiving DASA-funded services. Section 3B describes the characteristics of PPW women versus non-PPW women for each of six treatment modalities. Section 3C presents information on PPW women by whether or not they received services at facilities providing specialized programs for pregnant and postpartum women.

³ See Appendix A for a discussion of variables drawn from SAMS; Appendix B for how women in SAMS were unduplicated; Appendix C for a description of the determination of pregnancy status and pregnancy spans; and Appendix D for a discussion of the linkage between SAMS and the First Steps Database.

Section 3A: Demographic Information on Women Receiving DASA-Funded Services

This section describes demographic and treatment characteristics of all women who received DASA-funded treatment services in the year period July 1, 1990 through June 30, 1991.

The first table presents basic demographic and treatment information for all women receiving DASA-funded treatment services in the targeted year. The characteristics of pregnant and postpartum women (PPW) are compared to non-PPW women. The next four tables present demographic information for women in the four major ethnic groups of the State of Washington. There is evidence that racial and ethnic differences in drug use may be attributable to social and environmental conditions faced by persons with different ethnic characteristics and this should be considered in the interpretation of these tables (Lillie-Blanton et al., 1993).

TABLES 3.1-3.5: FINDINGS

- Approximately 15% of women who received DASA-funded substance abuse treatment were either pregnant or postpartum.
- Approximately 40% of women who were pregnant or postpartum (PPW) and received DASA-funded substance abuse treatment were less than 25 years of age, compared to 27% of non-PPW women. Less than 10% of women who were PPW and received DASA-funded substance abuse treatment were 35 years of age or older, compared to 37% of non-PPW women.
- Approximately 80% of women who received DASA-funded substance abuse treatment were unmarried.
- Alcohol was the primary drug of choice of approximately two-thirds (67%) of non-PPW women, compared to less than half (45%) of PPW women. The trend among PPW women was towards cocaine as a first drug of choice, with 29% of PPW having cocaine as a primary drug of choice compared to 13% for non-PPW women.⁴

⁴ PPW women were younger than non-PPW women and were more likely to have cocaine be their primary drug of choice. The possibility that the lower age of PPW women explains the higher proportion of PPW women with cocaine as their primary drug of choice was tested by adjusting for the different age distribution of PPW and non-PPW women. Using the indirect method of age-adjustment (Abramson, 1988), the age-adjusted proportion with cocaine as the primary drug of choice for non-pregnant, non-postpartum women was 18/100, considerably below the proportion of 29/100 for pregnant and postpartum women. This shows that the lower age of PPW women does not account for the higher proportion of PPW women with cocaine as their primary drug of choice.

FINDINGS (continued)

- Approximately 60% of women who received DASA-funded substance abuse treatment received outpatient treatment.
- For white women receiving DASA-funded treatment services, the primary drug of choice was cocaine for 11% of non-PPW women and 22% of PPW women; the primary drug of choice was alcohol for 67% of non-PPW women and 47% of PPW women.
- For Hispanic women receiving DASA-funded treatment services, the primary drug of choice was cocaine for 14% of non-PPW women and 37% of PPW women; the primary drug of choice was alcohol for 64% of non-PPW women and 46% of PPW women.
- For black women receiving DASA-funded treatment services, the primary drug of choice was cocaine for 37% of non-PPW women and 70% of PPW women; the primary drug of choice was alcohol for 40% of non-PPW women and 15% of PPW women.
- For American Indian women receiving DASA-funded treatment services, the primary drug of choice was cocaine for 5% of non-PPW women and 19% of PPW women; the primary drug of choice was alcohol for 87% of non-PPW women and 68% of PPW women.

TABLE 3.1

DEMOGRAPHIC CHARACTERISTICS OF WOMEN
RECEIVING DASA-FUNDED SERVICES 7/1/90 - 6/30/91

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=10890)		PREGNANT AND POSTPARTUM WOMEN (N=2009)	
RACE				
White	8559	(78.7%)	1456	(72.5%)
Hispanic	297	(2.7%)	66	(3.3%)
Black	948	(8.7%)	276	(13.8%)
American Indian	937	(8.6%)	192	(9.6%)
Asian	137	(1.3%)	19	(1.0%)
Other	3	(0.0%)	0	(0.0%)
Missing	9		0	
AGE				
<20	1956	(18.0%)	242	(12.1%)
20-24	941	(8.6%)	564	(28.1%)
25-29	1775	(16.3%)	601	(29.9%)
30-34	2170	(19.9%)	425	(21.2%)
35-39	1793	(16.5%)	161	(8.0%)
40+	2255	(20.7%)	16	(0.8%)
MARITAL STATUS				
Married	2149	(19.7%)	426	(21.2%)
Single	8741	(80.3%)	1583	(78.8%)
EDUCATION				
8 Years or Less	1317	(12.1%)	198	(9.9%)
Some High School	3773	(34.7%)	883	(44.0%)
High School Graduate	3820	(35.1%)	710	(35.3%)
Some College	1656	(15.2%)	194	(9.7%)
College Graduate	322	(3.0%)	24	(1.2%)
Missing	2		0	
DRUG OF CHOICE				
Alcohol	6028	(66.5%)	758	(44.6%)
Cocaine	1205	(13.3%)	495	(29.1%)
Heroin	843	(9.3%)	179	(10.5%)
Marijuana	716	(7.9%)	191	(11.2%)
Amphetamines	233	(2.6%)	75	(4.4%)
Unknown	47	(0.5%)	2	(0.1%)
Missing	1818		309	

TABLE 3.1
DEMOGRAPHIC CHARACTERISTICS OF WOMEN
RECEIVING DASA-FUNDED SERVICES 7/1/90 - 6/30/91
(Continued)

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=10890)		PREGNANT AND POSTPARTUM WOMEN (N=2009)	
TYPES OF TREATMENT RECEIVED*				
Intensive Inpatient	1811	(16.6%)	336	(16.7%)
Intensive Outpatient	2298	(21.1%)	588	(29.3%)
Outpatient	6453	(59.3%)	1231	(61.3%)
Long-term Care	853	(7.8%)	218	(10.9%)
Detox	1290	(11.9%)	123	(6.1%)
Methadone	618	(5.7%)	143	(7.1%)
NUMBER COMPLETING TREATMENT**				
Intensive Inpatient	1407	(78.1%)	244	(73.3%)
Intensive Outpatient	421	(18.5%)	89	(15.6%)
Outpatient	1490	(23.5%)	246	(20.2%)
Long-term Care	460	(56.1%)	113	(53.6%)
NUMBER OF DIFFERENT MODALITIES RECEIVED DURING 7/1/90-6/30/91				
One	8960	(82.3%)	1519	(75.6%)
Two	1484	(13.6%)	368	(18.3%)
Three or More	446	(4.1%)	122	(6.1%)

*The percentages add up to more than 100%, for a woman may receive more than one type of treatment. Receipt of service will range from one treatment session to weeks of intensive treatment.

**The percentages in this section are the percent of women who received each particular treatment modality and completed treatment. See Appendix F for more information on calculation of completion rates.

TABLE 3.2

DEMOGRAPHIC CHARACTERISTICS OF WHITE WOMEN
RECEIVING SERVICES 7/1/90 - 6/30/91

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=8559)		PREGNANT AND POSTPARTUM WOMEN (N=1456)	
AGE				
<20	1547	(18.1%)	194	(13.3%)
20-24	767	(9.0%)	420	(28.9%)
25-29	1395	(16.3%)	431	(29.6%)
30-34	1681	(19.6%)	298	(20.5%)
35-39	1381	(16.1%)	103	(7.1%)
40+	1788	(20.9%)	10	(0.7%)
MARITAL STATUS				
Married	1757	(20.5%)	327	(22.5%)
Single	6802	(79.5%)	1129	(77.5%)
EDUCATION				
8 Years or Less	967	(11.3%)	146	(10.0%)
Some High School	2936	(34.3%)	643	(44.2%)
High School Graduate	3015	(35.2%)	504	(34.6%)
Some College	1358	(15.9%)	142	(9.8%)
College Graduate	283	(3.3%)	21	(1.4%)
DRUG OF CHOICE				
Alcohol	4745	(67.2%)	577	(47.3%)
Cocaine	803	(11.4%)	273	(22.4%)
Heroin	646	(9.2%)	134	(11.0%)
Marijuana	601	(8.5%)	166	(13.6%)
Amphetamines	220	(3.1%)	67	(5.5%)
Unknown	42	(0.6%)	2	(0.2%)
Missing	1502		237	
TYPES OF TREATMENT RECEIVED*				
Intensive Inpatient	1324	(15.5%)	208	(14.3%)
Intensive Outpatient	1819	(21.3%)	401	(27.5%)
Outpatient	5178	(60.5%)	927	(63.7%)
Long-term Care	642	(7.5%)	141	(9.7%)
Detox	922	(10.8%)	91	(6.3%)
Methadone	471	(5.5%)	104	(7.1%)

*The percentages add up to more than 100%, for a woman may receive more than one type of treatment.

TABLE 3.3

**DEMOGRAPHIC CHARACTERISTICS OF HISPANIC WOMEN
RECEIVING SERVICES 7/1/90 - 6/30/91**

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=297)		PREGNANT AND POSTPARTUM WOMEN (N=66)*	
AGE				
<20	63	(21.2%)	13	(19.7%)
20-24	26	(8.8%)	15	(22.7%)
25-29	45	(15.2%)	18	(27.3%)
30-34	67	(22.6%)	15	(22.7%)
35-39	43	(14.5%)	4	(6.1%)
40+	53	(17.9%)	1	(1.5%)
MARITAL STATUS				
Married	48	(16.2%)	11	(16.7%)
Single	249	(83.8%)	55	(83.3%)
EDUCATION				
8 Years or Less	73	(24.6%)	11	(16.7%)
Some High School	107	(36.0%)	33	(50.0%)
High School Graduate	78	(26.3%)	17	(25.8%)
Some College	32	(10.8%)	5	(7.6%)
College Graduate	6	(2.0%)	0	(0.0%)
Missing	1		0	
DRUG OF CHOICE				
Alcohol	160	(64.3%)	27	(45.8%)
Cocaine	34	(13.7%)	22	(37.3%)
Heroin	31	(12.5%)	5	(8.5%)
Marijuana	19	(7.6%)	5	(8.5%)
Amphetamines	5	(2.0%)	0	(0.0%)
Unknown	0	(0.0%)	0	(0.0%)
Missing	48		7	
TYPES OF TREATMENT RECEIVED**				
Intensive Inpatient	39	(13.1%)	12	(18.2%)
Intensive Outpatient	58	(19.5%)	21	(31.8%)
Outpatient	185	(62.3%)	41	(62.1%)
Long-term Care	13	(4.4%)	9	(13.6%)
Detox	33	(11.1%)	3	(4.6%)
Methadone	20	(6.7%)	3	(4.6%)

*Because the number (N=66) of Hispanic women receiving DASA-funded treatment while they were pregnant or postpartum is small, the generalizations that may legitimately be drawn from these data are limited.

**The percentages add up to more than 100%, for a woman may receive more than one type of treatment.

TABLE 3.4

DEMOGRAPHIC CHARACTERISTICS OF BLACK WOMEN
RECEIVING SERVICES 7/1/90 - 6/30/91

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=948)		PREGNANT AND POSTPARTUM WOMEN (N=276)	
AGE				
<20	123	(13.0%)	12	(4.4%)
20-24	67	(7.1%)	63	(22.8%)
25-29	168	(17.7%)	96	(34.8%)
30-34	215	(22.7%)	69	(25.0%)
35-39	216	(22.8%)	33	(12.0%)
40+	159	(16.8%)	3	(1.1%)
MARITAL STATUS				
Married	139	(14.7%)	35	(12.7%)
Single	809	(85.3%)	241	(87.3%)
EDUCATION				
8 Years or Less	70	(7.4%)	10	(3.6%)
Some High School	330	(34.8%)	95	(34.4%)
High School Graduate	364	(38.4%)	128	(46.4%)
Some College	164	(17.3%)	41	(14.9%)
College Graduate	20	(2.1%)	2	(0.7%)
DRUG OF CHOICE				
Alcohol	334	(40.4%)	35	(14.8%)
Cocaine	305	(36.9%)	165	(69.6%)
Heroin	130	(15.7%)	26	(11.0%)
Marijuana	53	(6.4%)	10	(4.2%)
Amphetamines	1	(0.1%)	1	(0.4%)
Unknown	3	(0.4%)	0	(0.0%)
Missing	122		39	
TYPES OF TREATMENT RECEIVED*				
Intensive Inpatient	191	(20.2%)	47	(17.0%)
Intensive Outpatient	218	(23.0%)	116	(42.0%)
Outpatient	460	(48.5%)	134	(48.6%)
Long-term Care	99	(10.4%)	40	(14.5%)
Detox	164	(17.3%)	19	(6.9%)
Methadone	99	(10.4%)	28	(10.1%)

*The percentages add up to more than 100%, for a woman may receive more than one type of treatment.

TABLE 3.5

DEMOGRAPHIC CHARACTERISTICS OF AMERICAN INDIAN WOMEN
RECEIVING SERVICES 7/1/90 - 6/30/91

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=937)		PREGNANT AND POSTPARTUM WOMEN (N=192)	
AGE				
<20	164	(17.5%)	21	(10.9%)
20-24	70	(7.5%)	55	(28.7%)
25-29	147	(15.7%)	54	(28.1%)
30-34	184	(19.6%)	40	(20.8%)
35-39	139	(14.8%)	20	(10.4%)
40+	233	(24.9%)	2	(1.0%)
MARITAL STATUS				
Married	175	(18.7%)	44	(22.9%)
Single	762	(81.3%)	148	(77.1%)
EDUCATION				
8 Years or Less	172	(18.4%)	29	(15.1%)
Some High School	344	(36.7%)	102	(53.1%)
High School Graduate	320	(34.2%)	55	(28.7%)
Some College	90	(9.6%)	5	(2.6%)
College Graduate	10	(1.1%)	1	(0.5%)
Missing	1		0	
DRUG OF CHOICE				
Alcohol	715	(87.2%)	113	(68.1%)
Cocaine	43	(5.2%)	32	(19.3%)
Heroin	25	(3.1%)	10	(6.0%)
Marijuana	31	(3.8%)	7	(4.2%)
Amphetamines	5	(0.6%)	4	(2.4%)
Unknown	1	(0.1%)	0	(0.0%)
Missing	117		26	
TYPES OF TREATMENT RECEIVED*				
Intensive Inpatient	239	(25.5%)	66	(34.4%)
Intensive Outpatient	166	(17.7%)	44	(22.9%)
Outpatient	544	(58.1%)	121	(63.0%)
Long-term Care	93	(9.9%)	25	(13.0%)
Detox	159	(17.0%)	9	(4.7%)
Methadone	12	(1.3%)	5	(2.6%)

*The percentages add up to more than 100%, for a woman may receive more than one type of treatment.

Section 3B: Substance Abuse Treatment Modality

This section compares the demographic profiles of women who received the six major treatment modalities--intensive inpatient, intensive outpatient, outpatient, detox, long-term care (recovery house, extended care, and long-term care) and methadone. The same 12,899 women described in section 3A who received DASA-funded services in the year July 1, 1990 through June 30, 1991 are analyzed further in this section.

Table 3.6 reports the breakdown of women by treatment modality, indicating the number receiving each specific treatment modality when they were pregnant or postpartum. The following six tables report the characteristics of women receiving each of the six major treatment modalities. Table 3.6 can be used to explain the numbers that appear in the subsequent tables on specific treatment modalities. These numbers can be confusing since a woman could receive services in the targeted year both while she was pregnant or postpartum and while she was not pregnant or postpartum. For a woman to be reported as pregnant or postpartum and having received a specific treatment modality, she had to be pregnant or postpartum at the time that she received that modality.

For example, a total of 2,147 women ($1,811 + 336$) received intensive inpatient treatment (II). In the group of 336 women who received some type of DASA-funded treatment services while they were pregnant or postpartum and received II, there were 289 women who received II while they were pregnant or postpartum and the remaining 47 women did not receive II while they were pregnant or postpartum. These 47 women received some other type of DASA-funded services (such as outpatient or long-term care) while they were pregnant or postpartum and they are included in Table 3.7 along with the other non-pregnant and non-postpartum women ($1,811 + 47 = 1,858$).

TABLES 3.6-3.12: FINDINGS

- More than 10% of pregnant or postpartum women (PPW) with some DASA-funded substance abuse treatment had both intensive inpatient and outpatient treatment.
- Cocaine was the primary drug of choice for a higher proportion of PPW than non-PPW women for each of the six major treatment modalities.
- Among women who received intensive inpatient treatment, 60% of the PPW women were white and almost 75% of non-PPW women were white.
- Among women who received intensive outpatient treatment, 68% of the PPW women were white and almost 80% of non-PPW women were white.
- While 15% of the women who received substance abuse treatment were pregnant or postpartum, only 7% (97/1413) of the women who received detoxification services were pregnant or postpartum.

TABLE 3.6

NUMBER OF WOMEN RECEIVING SERVICES
BY MODALITY

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=10890)		PREGNANT AND POSTPARTUM WOMEN (N=2009)	
INTENSIVE INPATIENT (II)				
Total number of women receiving II	1811	(16.6%)	336	(16.7%)
Number receiving II while pregnant or postpartum			289	(14.4%)
Number receiving II and Outpatient (either Intensive Outpatient or Outpatient)	897	(8.2%)	218	(10.9%)
INTENSIVE OUTPATIENT (IO)				
Total number of women receiving IO	2298	(21.1%)	588	(29.3%)
Number receiving IO while pregnant or postpartum			573	(28.5%)
OUTPATIENT (OP)				
Total number of women receiving OP	6453	(59.3%)	1231	(61.3%)
Number receiving OP while pregnant or postpartum			1203	(59.9%)
DETOX (DX)				
Total number of women receiving DX	1290	(11.9%)	123	(6.1%)
Number receiving DX while pregnant or postpartum			97	(4.8%)
LONG-TERM CARE (LT)				
Total number of women receiving LT	853	(7.8%)	218	(10.9%)
Number receiving LT while pregnant or postpartum			202	(10.1%)
METHADONE (MT)				
Total number of women receiving MT	618	(5.7%)	143	(7.1%)
Number receiving MT while pregnant or postpartum			139	(6.9%)

TABLE 3.7

**DEMOGRAPHIC CHARACTERISTICS OF WOMEN
RECEIVING INTENSIVE INPATIENT SERVICES 7/1/90 - 6/30/91**

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=1858)*		PREGNANT AND POSTPARTUM WOMEN (N=289)*	
RACE				
White	1357	(73.1%)	175	(60.6%)
Hispanic	42	(2.3%)	9	(3.1%)
Black	196	(10.6%)	42	(14.5%)
American Indian	245	(13.2%)	60	(20.8%)
Asian	16	(0.9%)	3	(1.0%)
Missing	2		0	
AGE				
<20	346	(18.6%)	30	(10.4%)
20-24	233	(12.5%)	91	(31.5%)
25-29	359	(19.3%)	82	(28.4%)
30-34	390	(21.0%)	66	(22.8%)
35-39	238	(12.8%)	19	(6.6%)
40+	292	(15.7%)	1	(0.4%)
MARITAL STATUS				
Married	326	(17.6%)	59	(20.4%)
Single	1532	(82.5%)	230	(79.6%)
EDUCATION				
8 Years or Less	255	(13.7%)	38	(13.2%)
Some High School	744	(40.0%)	141	(48.8%)
High School Graduate	609	(32.8%)	85	(29.4%)
Some College	215	(11.6%)	23	(8.0%)
College Graduate	35	(1.9%)	2	(0.7%)
DRUG OF CHOICE				
Alcohol	1098	(64.5%)	124	(46.8%)
Cocaine	322	(18.9%)	93	(35.1%)
Heroin	88	(5.2%)	16	(6.0%)
Marijuana	136	(8.0%)	17	(6.4%)
Amphetamines	58	(3.4%)	15	(5.7%)
Unknown	1	(0.1%)	0	(0.0%)
Missing	155		24	

*To reconcile these N's with those in Table 2.1 note that there were 47 (339-289) women who received II services when they were not PPW although they received some other services when they were PPW. These 47 women are added to the other 1811 non-PPW women receiving II services (1811+47=1858).

TABLE 3.8

**DEMOGRAPHIC CHARACTERISTICS OF WOMEN
RECEIVING INTENSIVE OUTPATIENT SERVICES 7/1/90 - 6/30/91**

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=2313)*		PREGNANT AND POSTPARTUM WOMEN (N=573)*	
RACE				
White	1828	(79.2%)	392	(68.4%)
Hispanic	60	(2.6%)	19	(3.3%)
Black	221	(9.6%)	113	(19.7%)
American Indian	167	(7.2%)	43	(7.5%)
Asian	32	(1.4%)	6	(1.1%)
Other	1	(0.0%)	0	(0.0%)
Missing	4		0	
AGE				
<20	233	(10.1%)	29	(5.1%)
20-24	236	(10.2%)	189	(33.0%)
25-29	453	(19.6%)	188	(32.8%)
30-34	536	(23.2%)	128	(22.3%)
35-39	386	(16.7%)	35	(6.1%)
40+	469	(20.3%)	4	(0.7%)
MARITAL STATUS				
Married	476	(20.6%)	119	(20.8%)
Single	1837	(79.4%)	454	(79.2%)
EDUCATION				
8 Years or Less	206	(8.9%)	45	(7.9%)
Some High School	714	(30.9%)	239	(41.7%)
High School Graduate	929	(40.2%)	230	(40.1%)
Some College	403	(17.4%)	56	(9.8%)
College Graduate	60	(2.6%)	3	(0.5%)
Missing	1		0	
DRUG OF CHOICE				
Alcohol	1397	(74.1%)	225	(46.8%)
Cocaine	266	(14.1%)	165	(34.3%)
Heroin	45	(2.4%)	13	(2.7%)
Marijuana	129	(6.8%)	52	(10.8%)
Amphetamines	48	(2.6%)	26	(5.4%)
Unknown	0	(0.0%)	0	(0.0%)
Missing	428		92	

*To reconcile these N's with those in Table 2.1 note that there were 15 (588-573) women who received IO services when they were not PPW although they received some other services when they were PPW. These 15 women are added to the other 2298 non-PPW women receiving IO services (2298+15=2313).

TABLE 3.9

**DEMOGRAPHIC CHARACTERISTICS OF WOMEN
RECEIVING OUTPATIENT SERVICES 7/1/90 - 6/30/91**

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=6481)*		PREGNANT AND POSTPARTUM WOMEN (N=1203)*	
RACE				
White	5199	(80.3%)	906	(75.3%)
Hispanic	185	(2.9%)	41	(3.4%)
Black	462	(7.1%)	132	(11.0%)
American Indian	549	(8.5%)	116	(9.6%)
Asian	80	(1.2%)	8	(0.7%)
Other	1	(0.0%)	0	(0.0%)
Missing	5		0	
AGE				
<20	1501	(23.2%)	184	(15.3%)
20-24	552	(8.5%)	343	(28.5%)
25-29	1017	(15.7%)	343	(28.5%)
30-34	1237	(19.1%)	228	(19.0%)
35-39	958	(14.8%)	96	(8.0%)
40+	1216	(18.8%)	9	(0.8%)
MARITAL STATUS				
Married	1210	(18.7%)	270	(22.4%)
Single	5271	(81.3%)	933	(77.6%)
EDUCATION				
8 Years or Less	896	(13.8%)	122	(10.1%)
Some High School	2326	(35.9%)	544	(45.2%)
High School Graduate	2158	(33.3%)	415	(34.5%)
Some College	912	(14.1%)	111	(9.2%)
College Graduate	189	(2.9%)	11	(0.9%)
DRUG OF CHOICE				
Alcohol	3689	(69.6%)	501	(50.1%)
Cocaine	694	(13.1%)	283	(28.3%)
Heroin	190	(3.6%)	32	(3.2%)
Marijuana	528	(10.0%)	139	(13.9%)
Amphetamines	155	(2.9%)	44	(5.5%)
Unknown	47	(0.9%)	2	(0.2%)
Missing	1178		202	

*To reconcile these N's with those in Table 2.1 note that there were 28 (1231-1203) women who received OP services when they were not PPW although they received some other services when they were PPW. These 28 women are added to the other 6453 non-PPW women receiving OP services (6453+28=6481).

TABLE 3.10
DEMOGRAPHIC CHARACTERISTICS OF WOMEN
RECEIVING DETOX SERVICES 7/1/90 - 6/30/91

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=1316)*		PREGNANT AND POSTPARTUM WOMEN (N=97)*	
RACE				
White	944	(71.9%)	69	(71.1%)
Hispanic	33	(2.5%)	3	(3.1%)
Black	167	(12.7%)	16	(16.5%)
American Indian	160	(12.2%)	8	(8.3%)
Asian	8	(0.6%)	1	(1.0%)
Other	1	(0.1%)	0	(0.0%)
Missing	3		0	
AGE				
<20	31	(2.4%)	3	(3.1%)
20-24	106	(8.1%)	16	(16.5%)
25-29	226	(17.2%)	33	(34.0%)
30-34	283	(21.5%)	31	(32.0%)
35-39	266	(20.2%)	13	(13.4%)
40+	404	(30.7%)	1	(1.0%)
MARITAL STATUS				
Married	297	(22.6%)	17	(17.5%)
Single	1019	(77.4%)	80	(82.5%)
EDUCATION				
8 Years or Less	85	(6.5%)	6	(6.2%)
Some High School	434	(33.0%)	44	(45.4%)
High School Graduate	519	(39.4%)	34	(35.1%)
Some College	224	(17.0%)	10	(10.3%)
College Graduate	54	(4.1%)	3	(3.1%)
DRUG OF CHOICE				
Alcohol	837	(67.9%)	36	(41.4%)
Cocaine	159	(12.9%)	25	(28.7%)
Heroin	203	(16.5%)	21	(24.1%)
Marijuana	19	(1.5%)	2	(2.3%)
Amphetamines	14	(1.1%)	3	(3.5%)
Unknown	1	(0.1%)	0	(0.0%)
Missing	83		10	

*To reconcile these N's with those in Table 2.1 note that there were 26 (123-97) women who received DX services when they were not PPW although they received some other services when they were PPW. These 26 women are added to the other 1290 non-PPW women receiving DX services (1290+26=1316).

TABLE 3.11

DEMOGRAPHIC CHARACTERISTICS OF WOMEN
RECEIVING LONG TERM SERVICES 7/1/90 - 6/30/91

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=869)*		PREGNANT AND POSTPARTUM WOMEN (N=202)*	
RACE				
White	654	(75.4%)	129	(63.9%)
Hispanic	14	(1.6%)	8	(4.0%)
Black	100	(11.5%)	39	(19.3%)
American Indian	95	(10.9%)	23	(11.4%)
Asian	5	(0.6%)	3	(1.5%)
Missing	1		0	
AGE				
<20	12	(1.4%)	19	(9.4%)
20-24	116	(13.4%)	58	(28.7%)
25-29	169	(19.5%)	63	(31.2%)
30-34	213	(24.5%)	44	(21.8%)
35-39	163	(18.8%)	17	(8.4%)
40+	196	(22.6%)	1	(0.5%)
MARITAL STATUS				
Married	170	(19.6%)	46	(22.8%)
Single	699	(80.4%)	156	(77.2%)
EDUCATION				
8 Years or Less	57	(6.6%)	32	(15.8%)
Some High School	304	(35.0%)	106	(52.5%)
High School Graduate	347	(39.9%)	52	(25.7%)
Some College	137	(15.8%)	10	(5.0%)
College Graduate	24	(2.8%)	2	(1.0%)
DRUG OF CHOICE				
Alcohol	468	(59.9%)	50	(27.5%)
Cocaine	180	(23.0%)	79	(43.4%)
Heroin	77	(9.9%)	26	(14.3%)
Marijuana	29	(3.7%)	11	(6.0%)
Amphetamines	28	(3.6%)	16	(8.8%)
Unknown	0	(0.0%)	0	(0.0%)
Missing	87		20	

*To reconcile these N's with those in Table 2.1 note that there were 16 (218-202) women who received LT services when they were not PPW although they received some other services when they were PPW. These 16 women are added to the other 853 non-PPW women receiving LT services (853+16=869).

TABLE 3.12

**DEMOGRAPHIC CHARACTERISTICS OF WOMEN
RECEIVING METHADONE SERVICES 7/1/90 - 6/30/91**

	NON-PREGNANT NON-POSTPARTUM WOMEN (N=622)*		PREGNANT AND POSTPARTUM WOMEN (N=139)*	
RACE				
White	474	(76.3%)	101	(72.7%)
Hispanic	20	(3.2%)	3	(2.2%)
Black	100	(16.1%)	27	(19.4%)
American Indian	12	(1.9%)	5	(3.6%)
Asian	15	(2.4%)	3	(2.2%)
Missing	1		0	
AGE				
<20	1	(0.2%)	0	(0.0%)
20-24	11	(1.8%)	10	(7.2%)
25-29	52	(8.4%)	42	(30.2%)
30-34	129	(20.7%)	58	(41.7%)
35-39	225	(36.2%)	27	(19.4%)
40+	204	(32.8%)	2	(1.4%)
MARITAL STATUS				
Married	159	(25.6%)	18	(13.0%)
Single	463	(74.4%)	121	(87.1%)
EDUCATION				
8 Years or Less	43	(6.9%)	11	(7.9%)
Some High School	148	(23.8%)	43	(30.9%)
High School Graduate	270	(43.4%)	59	(42.5%)
Some College	139	(22.4%)	21	(15.1%)
College Graduate	22	(3.5%)	5	(3.6%)
Missing	0		0	
DRUG OF CHOICE				
Alcohol	2	(0.5%)	1	(0.8%)
Cocaine	2	(0.5%)	1	(0.8%)
Heroin	445	(99.1%)	118	(98.3%)
Marijuana	0	(0.0%)	0	(0.0%)
Amphetamines	0	(0.0%)	0	(0.0%)
Unknown	0	(0.0%)	0	(0.0%)
Missing	173		19	

*To reconcile these N's with those in Table 2.1 note that there were 4 (143-139) women who received MT services when they were not PPW although they received some other services when they were PPW. These 4 women are added to the other 618 non-PPW women receiving MT services (618+4=622).

Section 3C: Specialized Services for Pregnant and Postpartum Women

This section compares pregnant and postpartum women (PPW) who received treatment at facilities with specialized services for pregnant and postpartum women to those who received treatment at facilities without such services. Each of three major modalities--intensive inpatient, intensive outpatient, and outpatient--was analyzed separately. The previous sections identified 2,009 PPW women who had DASA-funded treatment services in July 1, 1990 through June 30, 1991. This section further describes the subset of PPW women who had either intensive inpatient, intensive outpatient, or outpatient treatment while they were pregnant or postpartum. A list of the intensive inpatient and outpatient facilities offering specialized programs for PPW women in the targeted year period was provided by DASA. If a woman received the treatment modality while she was pregnant or postpartum, then she was flagged if she ever received that modality at a facility providing specialized PPW services.

A facility was classed as specialized if it provided special treatment services for pregnant and postpartum women. Programs which contracted for specialized services provided the following services: individual or group counseling and education on prenatal health care, childbirth preparation, parenting and abuse issues, family planning and other issues relevant to pregnant and parenting women; connection to First Steps maternity support services and case management; transportation; childcare on site or in the community; medical protocol for emergencies and childbirth; liaison with Child Protective Services/Child Welfare Services; and aftercare planning and relapse prevention. The intensity and approach varied between residential and outpatient facilities and among programs. All specialized residential programs allowed women to bring their infants into residence.

During the study period few women received intensive inpatient treatment at facilities with specialized services. The Omnibus Drug Act of 1989 appropriated money for the provision of specialized treatment services; substantial time was required for the implementation of specialized intensive inpatient treatment services.

TABLES 3.12-3.14: FINDINGS

- Only 35 women received intensive inpatient treatment at facilities with specialized programs for pregnant or postpartum women (PPW) in the period July 1, 1990 through June 30, 1991.
- More than 50% of PPW women with DASA-funded intensive outpatient or outpatient treatment received treatment at facilities with specialized programs for PPW women.
- For PPW women who received intensive outpatient treatment, almost 75% of black women (83/113) went to facilities with specialized programs for pregnant or postpartum women while less than 50% of white women (179/392) went to such facilities.⁵

⁵ In this time period there were marked geographic differences in the availability of specialized services. More than 95% of all PPW women in King County who had intensive outpatient treatment received those services at a specialized facility. Since King County has a greater percentage of blacks than the state as a whole, this geographic difference in the availability of specialized services might explain the high percentage of blacks receiving intensive outpatient treatment at specialized facilities during this time period. On the other hand, the only intensive inpatient facility offering specialized services for PPW women was in Spokane County, which may explain the high proportion of white women receiving intensive inpatient treatment at specialized facilities. Because specialized services for specific modalities were available in a limited number of counties, the characteristics of women who received specialized services for a specific modality reflect the characteristics of the women who reside in those counties.

TABLE 3.13

DEMOGRAPHIC CHARACTERISTICS OF PREGNANT AND
POSTPARTUM WOMEN RECEIVING INTENSIVE INPATIENT TREATMENT:
PROVISION OF SPECIALIZED SERVICES 7/1/90 - 6/30/91

	DID NOT RECEIVE SPECIALIZED SERVICES (N=254)		RECEIVED SPECIALIZED SERVICES (N=35)*	
RACE				
White	147	(57.9%)	28	(80.0%)
Hispanic	7	(2.8%)	2	(5.7%)
Black	40	(15.8%)	2	(5.7%)
American Indian	57	(22.4%)	3	(8.6%)
Asian	3	(1.2%)	0	(0.0%)
AGE				
<20	29	(11.4%)	1	(2.9%)
20-24	75	(29.5%)	16	(45.7%)
25-29	74	(29.1%)	8	(22.9%)
30-34	56	(22.1%)	10	(28.6%)
35-39	19	(7.5%)	0	(0.0%)
40+	1	(0.4%)	0	(0.0%)
MARITAL STATUS				
Married	54	(21.3%)	5	(14.3%)
Single	200	(78.7%)	30	(85.7%)
EDUCATION				
8 Years or Less	36	(14.2%)	2	(5.7%)
Some High School	121	(47.6%)	20	(57.1%)
High School Graduate	76	(29.9%)	9	(25.7%)
Some College	19	(7.5%)	4	(11.4%)
College Graduate	2	(0.8%)	0	(0.0%)
DRUG OF CHOICE				
Alcohol	113	(44.5%)	11	(31.4%)
Cocaine	77	(30.3%)	16	(45.7%)
Heroin	16	(6.3%)	0	(0.0%)
Marijuana	15	(5.9%)	2	(5.7%)
Amphetamines	13	(5.1%)	2	(5.7%)
Other or Missing	20	(7.9%)	4	(11.4%)

*Because the actual number (N=35) of women receiving specialized services is small, the generalizations that may legitimately be drawn from this data are limited.

TABLE 3.14

DEMOGRAPHIC CHARACTERISTICS OF PREGNANT AND
POSTPARTUM WOMEN RECEIVING INTENSIVE OUTPATIENT TREATMENT:
PROVISION OF SPECIALIZED SERVICES 7/1/90 - 6/30/91

	DID NOT RECEIVE SPECIALIZED SERVICES (N=273)		RECEIVED SPECIALIZED SERVICES (N=300)	
RACE				
White	213	(78.0%)	179	(59.7%)
Hispanic	6	(2.2%)	13	(4.3%)
Black	30	(11.0%)	83	(27.7%)
American Indian	19	(7.0%)	24	(8.0%)
Asian	5	(1.8%)	1	(0.3%)
AGE				
<20	21	(7.7%)	8	(2.7%)
20-24	95	(34.8%)	94	(31.3%)
25-29	86	(31.5%)	102	(34.0%)
30-34	55	(20.2%)	73	(24.3%)
35-39	15	(5.5%)	20	(6.7%)
40+	1	(0.4%)	3	(1.0%)
MARITAL STATUS				
Married	63	(23.1%)	56	(18.7%)
Single	210	(76.9%)	244	(81.3%)
EDUCATION				
8 Years or Less	26	(9.5%)	19	(6.3%)
Some High School	119	(43.6%)	120	(40.0%)
High School Graduate	105	(38.5%)	125	(41.7%)
Some College	23	(8.4%)	33	(11.0%)
College Graduate	0	(0.0%)	3	(1.0%)
DRUG OF CHOICE				
Alcohol	114	(41.8%)	111	(37.0%)
Cocaine	62	(22.7%)	103	(34.3%)
Heroin	7	(2.6%)	6	(2.0%)
Marijuana	27	(9.9%)	25	(8.3%)
Amphetamines	19	(7.0%)	7	(2.3%)
Other or Missing	44	(16.1%)	48	(16.0%)

TABLE 3.15

DEMOGRAPHIC CHARACTERISTICS OF PREGNANT AND
POSTPARTUM WOMEN RECEIVING OUTPATIENT TREATMENT:
PROVISION OF SPECIALIZED SERVICES 7/1/90 - 6/30/91

	DID NOT RECEIVE SPECIALIZED SERVICES (N=529)		RECEIVED SPECIALIZED SERVICES (N=674)	
RACE				
White	402	(76.0%)	504	(74.8%)
Hispanic	17	(3.2%)	24	(3.6%)
Black	49	(9.3%)	83	(12.3%)
American Indian	54	(10.2%)	62	(9.2%)
Asian	7	(1.3%)	1	(0.2%)
AGE				
<20	87	(16.5%)	97	(14.4%)
20-24	155	(29.3%)	188	(27.9%)
25-29	143	(27.0%)	200	(29.7%)
30-34	101	(19.1%)	127	(18.8%)
35-39	40	(7.6%)	56	(8.3%)
40+	3	(0.6%)	6	(0.9%)
MARITAL STATUS				
Married	113	(21.4%)	157	(23.3%)
Single	416	(78.6%)	517	(76.7%)
EDUCATION				
8 Years or Less	59	(11.2%)	63	(9.4%)
Some High School	253	(47.8%)	291	(43.2%)
High School Graduate	175	(33.1%)	240	(35.6%)
Some College	40	(7.6%)	71	(10.5%)
College Graduate	2	(0.4%)	9	(1.3%)
DRUG OF CHOICE				
Alcohol	236	(44.6%)	265	(39.3%)
Cocaine	116	(21.9%)	167	(24.8%)
Heroin	16	(3.0%)	16	(2.4%)
Marijuana	52	(9.8%)	87	(12.9%)
Amphetamines	29	(5.5%)	15	(2.2%)
Other or Missing	80	(15.1%)	124	(18.4%)

DISCUSSION

The information presented in this report raises at least as many questions as it answers. Many different interpretations are possible, and further analysis of other data from the First Steps Database, SAMS, and other sources may suggest additional perspectives on these issues. Some preliminary observations will be discussed.

Among women with Medicaid-paid maternity care, women with identified substance abuse problems had more risk factors associated with poor pregnancy outcomes than women without identified substance abuse problems: 75% were unmarried, 50% were smokers, and 75% were low income. All four of these characteristics -- unmarried marital status, smoking, low income, and substance abuse -- are associated with high rates of low birthweight (Institute of Medicine, 1985).

For the subgroup of Medicaid women with identified substance abuse problems, medical payments for women who began treatment in the prenatal period (\$5600) were higher than for women who either entered treatment in the postpartum period (\$4600) or never received treatment (\$5100); however, the Medicaid payments in the first year of life for the infants of these women who entered treatment in the prenatal period were lower (\$3000) than those for the infants of women who entered treatment postpartum (\$4100) or never received treatment (\$3300). This suggests that the substance abuse treatment and high level of prenatal medical care received by women with substance abuse treatment in the prenatal period had a positive impact on birth outcomes. This is supported by the additional finding that women with prenatal substance abuse treatment had a lower rate of low birthweight infants (8.7%) than did substance abusers with either postpartum substance abuse treatment (13.9%) or no treatment for substance abuse (12.9%). Differences in infant health status may persist or even magnify over time (Chollet et al., 1992): infants of women with untreated substance abuse problems may continue to have higher medical care utilization, compared to the infants of substance abusing women with prenatal treatment, and additional problems related to learning or developmental disabilities may emerge as these children mature (Schneider et al., 1989).

Many important questions in evaluating substance abuse treatment for pregnant and postpartum women and in determining the impact of treatment on birth outcomes were not examined in this preliminary report. For example, this report did not examine the differences among women who dropped out of treatment versus women who completed some significant treatment regime, women with different primary drugs of choice, or women with early prenatal care versus late or no prenatal care. The causes of adverse birth outcomes are not simple, nor are the solutions. The data which have been presented are not intended to serve as answers but rather to stimulate discussion, focus further analysis, and provide a basis for more in-depth evaluations of interventions. Most importantly, the data serve as a tool to help in meeting the challenges which face us in ensuring optimal birth outcomes for all women and providing risk-appropriate prenatal care and substance abuse treatment.

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APPENDICES

Appendix A: Definition of Analytic Variables

Maternal Characteristics

Data on maternal characteristics came from both the Substance Abuse Management System (SAMS) and the First Steps Database. Some information was only in one database and some occurred in both databases. Drug of choice and education were only available in SAMS; smoking, month prenatal care began, date of delivery, Medicaid payments and Medicaid eligibility were only available in the First Steps Database. For data available in both systems (age, race, and marital status), the First Steps Database was used when it had information on the entire study population.

All the data on maternal characteristics used in Part 1 came from the First Steps Database. For Part 2, drug of choice and education came from SAMS and the other variables were taken from the First Steps Database. In Part 3, all of the data came from SAMS.

The use of SAMS data presented difficulties because many of the women in SAMS have more than one entry containing demographic information and sometimes these entries contain conflicting data. Women may have more than one entry for a particular Personal Identification Code (PIC), more than one entry in related PICs which we linked by "picette" (see Appendix B), or entries in more than one of the demographic files in SAMS (Demographic File, Client Index File and ADATSA BRID file). The maternal characteristics affected by this multiplicity were race, education, marital status, and drug of choice. For each of these variables we chose the nearest non-missing entry to the midpoint of the study period, December 31, 1990. For example, an education entry of 11 years made in October of 1990 took precedence over an education entry of 12 years in April of 1991. For the variable race, women with a value in the Hispanic Origin field were considered to be of Hispanic race/ethnicity. Age was calculated using the PIC to determine the woman's age on December 31, 1990.

Substance Abuse Treatment

Hospital-based intensive inpatient treatments were identified using Medicaid claims in the First Steps Database. All other substance abuse treatment information came from SAMS. Three major treatment files in SAMS were used for this report: the Treatment Activity file (DRID), the Current Biennium Placement file (CRID), and the Detox file.

All entries in the CRID file without a discharge date were deleted. Entries from the CRID file were kept if they had an admission date in the period July 1, 1990 through June 30, 1991, a discharge date in that year period, or an admission date before July 1, 1990 and a discharge date after June 30, 1991. Entries in the DRID file were kept if they had an admission date in the period July 1, 1990 through June 30, 1991, a treatment date in that year, or an admission date before July 1, 1990 and a treatment date after June 30, 1991. The DRID file does not contain information on discharge status. Entries in the DRID file for an individual with the same admission date to the same facility were summarized so that the first date of treatment was considered the start date, and the last date of treatment was considered the end date of

treatment. Entries in the Detox file were kept if either the entry date or exit date were within the time period of interest.

Data from all three treatment files were used to compile a treatment profile for each woman. In general, when information was available from only one file then the main task was to combine overlapping spans and to resolve conflicting information by using the update field. When information was available from both the CRID and DRID files the dates of treatment in the DRID file were given priority over dates in the CRID file, but information on discharge status was retained from the CRID file. The source files for the different treatment modalities were as follows: Intensive Inpatient, CRID file; Intensive Outpatient, CRID and DRID files; Outpatient, CRID and DRID files; Long Term Care, CRID file; Detox, Detox and CRID files; and Methadone, CRID and DRID files.

Trimester Treatment Began

Estimation of the trimester that treatment began required linking a woman's date of delivery of an infant (from the First Steps Database) with the earliest date during pregnancy or a year postpartum that substance abuse treatment began (from SAMS or the First Steps Database). Trimester was estimated assuming that the pregnancy went to term.

Appendix B: Unduplication of Women in SAMS

Investigation of the personal identifiers used in SAMS indicated that many DASA clients have records under more than one identifier. This was a serious obstacle to using information in SAMS. We needed to consolidate the records for a client having multiple identifiers; otherwise, all counts of clients served and their history of service records would be seriously biased.

Clients are tracked in SAMS using an identifier (PIC) consisting of the first five letters of their last name, their first initial, their middle initial, their date of birth, and a tiebreaker. The tiebreaker serves to distinguish the records of individuals who would otherwise have identical identifiers, a rare occurrence among women in SAMS. Inspection of SAMS records using full name, social security number, county of residence and other demographic information indicated that single individuals are often given more than one identifier, usually differing in tiebreaker or in middle initial (usually the middle initial is missing in one identifier and not the other).

Based on the above observation we created a shorter version of the Personal Identification Code (PIC) with the middle initial and the tiebreaker deleted. We refer to this new identifier as a "picette". The four treatment files -- SAMS DRID (SAMS*Act-Tape or Treatment Activity Log), SAMS ERID (SAMS*Detox-Tape or Detox), SAMS CRID (SAMS*Place-Tape or Current Biennium Placements), and ADATSA CRID -- were screened to pull out PICS for women who received treatment in July 1, 1990 through June 30, 1991. Women were identified using SEX='F' in either the SAMS IRID file (Sams*Client-Tape or Client Index), the SAMS BRID file (SAMS*Tape-B or SAMS Demographic) or the ADATSA BRID file (ADATSA Admissions/Assessments).

A total of 17,540 unique PICs for women in SAMS were identified. These PICS represent 14,156 picettes. Of roughly 3000 picettes associated with more than one PIC we sampled 207 picettes. These 207 picettes were associated with 475 PICs. We evaluated these 207 picettes in order to estimate the number of erroneous matches that would be used by using picette rather than PIC. An erroneous match would result when two women had distinct PICs but were linked to the same picette. To verify the matches we made a listing showing pics, picettes, full last name, full first name, full middle name, date of birth, county of residence, zip code, and education. Of the 475 PICs we examined, 20 were linked to 10 individuals by social security number. Another 252 were linked to 123 individuals by last name, first name, date of birth, and county of residence. The remaining 203 were linked to 74 individuals or to individuals identified in previous steps by direct examination of the demographic information. In most cases variants in the spelling of the names produced the multiple identifiers. In the sample we looked at, there was only one possible case where a picette may have incorrectly linked two individuals. In this case the last name, date of birth, and county of residence were identical, but the two first names were Carla and Candy. Thus, with only one possible pair of women erroneously combined under one picette out of 207 picettes, it would appear the rate of mistaken combinations of different women's PICs by using picettes was very low (<.01).

Appendix C: Identification of Prenatal/Postpartum Status

Identification of Pregnancy/Postpartum Status

Three strategies were used to identify women who received DASA services in their prenatal or postpartum period. First, for women who received DASA services and were linked to births in the First Steps Database, it was determined if any of their DASA-funded treatment services occurred in the prenatal period or one year postpartum. Second, treatments funded under the special program for pregnant and postpartum women were used to flag women as pregnant or postpartum when they received that service (i.e., a 'P' as the third character of the modality variable). Third, a lengthy process was used to determine pregnancy status and pregnancy spans using field 32 (the PG variable) of the SAMS demographics file (BRID).

The PG variable indicates whether a woman client is pregnant or in the postpartum period. The variable has the values 1, 2, 3, P, or N. If a woman is pregnant, the variable will indicate the trimester (1,2,3). If a woman has delivered in the past year, the variable should be coded 'P'. Otherwise, the field is 'N' or missing. Occasionally women have a series of entries in the SAMS demographics file over a period of time with identical entries for the PG variable. In these cases we selected the earliest entry as indicating the time at which the trimester of pregnancy was determined.⁶

We assessed the accuracy of the PG variable by comparing its values to actual delivery dates for women whom we could match to a birth in the First Steps database. Because we could link a significant number of SAMS pregnant women to women whose date of giving birth we knew precisely, we were able to estimate the accuracy of the value of the PG variable in SAMS. We found that SAMS underestimated trimester; women indicated to be in their first trimester were often in their second trimester, and women said to be in their third trimester, as often as not, had already delivered their child.

Identification of Pregnancy/Postpartum Spans

Pregnancy and postpartum spans were estimated for women who linked to an infant's birth in the First Steps Database or who had a value of "1", "2", or "3" for their PG variable. (Pregnancy/ postpartum spans could not be imputed for a woman with a value of 'P' in the PG variable.) If a woman was linked to an infant's birth in the First Steps Database, then pregnancy/ postpartum spans were constructed around the date of her child's birth. A lengthy process was used to impute pregnancy/postpartum spans for women whose pregnancy status was indicated in the PG variable but did not link to a birth in the First Steps Database.

⁶ At one time pregnancy information was mistakenly entered in the legal alien field (Field 26 in the SAMS demographic file, BRID). The l_alien variable is supposed to have the values 'Y' or 'N'. Because there was no overlap between these values and the values of interest in the PG variable we were able to correct for this error by copying the contents of the l_alien variable into the PG variable when the PG variable was missing.

First, we developed estimates for prenatal/postpartum spans which would correctly classify 90% of the women for whom we had known dates of delivery in the First Steps Database and used those estimates for women who had entries containing values of 1, 2, or 3 in the PG field and were not linked to a birth in the First Steps Database. We made conservative estimates, preferring to fail to identify a treatment that occurred when a woman was in the prenatal or postpartum period than to identify a treatment as occurring when a woman was in the prenatal or postpartum period when it did not. The imputed spans for these women whose date of delivery we could not determine using the First Steps Database are considerably shorter than the eight months prenatal and year postpartum that we used for women who matched to births in the First Steps Database.

For women whose date of delivery was unknown and who had a 1, 2, or 3 in the PG variable the following rule was used to estimate the time of delivery and her prenatal period: if PG=1 then the pregnancy was estimated to have begun 60 days prior to the entry date and delivery to have occurred 90 days after the entry date; if PG=2 then the pregnancy was estimated to have begun 90 days prior to the entry date and delivery to have occurred 70 days after the entry date; and if PG=3 then the pregnancy was estimated to have begun 150 days prior to the entry date and delivery to have occurred at the time of the entry date. For women in all three groups the postpartum period was imputed to extend 180 days after the estimated time of delivery.

Appendix D: Linkage Between SAMS and First Steps Database

SAMS

All women in SAMS with treatment in the period, July 1, 1990 through June 30, 1991 were selected. Items necessary for matching were the woman's full last name, full first name, middle name and date of birth. Social security number and county of residence were also used. Women without a county of residence recorded in SAMS were only matched if their social security number matched to a social security number in Medicaid records. Women often have more than one county of residence recorded in SAMS. When this occurred we kept all records of different counties to aid in matching. Zip codes were retained to aid in verifying matches. (Social security numbers were present for about 30% of the clients in SAMS.)

First Steps Database

Fields used for matching First Steps women to SAMS came from the Birth Certificate. Fields used were legal name, maiden name, child's last name, mother's first name, mother's middle initial, mother's date of birth, mother's county of residence and zip code. For Medicaid women, we also used social security number when it was available from the Office of Financial Management's eligibility history file.

Matching Process

Women who gave birth from July 1989 through December 1991 were matched to the women in SAMS who had treatment in July 1990 through June 1991. We performed the match in a series of steps moving from perfect matches to less perfect matches. The first match was by social security number; about 30% were matched at this step. The second match was by full first name, full last name, date of birth, and county of residence; about 50% were matched at this step. These first two steps were automated and made up over 80% of our links. The remaining 20% of matches were made by looking at women who were in adjacent counties but matched on picette. All of these matches were proofread by hand by an analyst before being accepted.

Appendix E: Substance Abuse Diagnoses

The First Steps Database contains information on medical diagnoses assigned by health care providers on the Medicaid claims submitted for payment for Medicaid clients. These diagnosis codes (ICD-9) from Medicaid claims were used to identify Medicaid clients who were identified as abusing substances.

Maternal Diagnoses Indicating Substance Abuse in the Mother

Diagnosis codes beginning with:

- 291 Alcoholic Psychoses
- 292 Drug psychoses/withdrawal syndrome
- 303 Alcohol dependence
- 304 Drug dependence
- 305 Nondependent drug/alcohol abuse
 (except 305.1 for Tobacco Abuse)

The following specific codes:

- 571.1 Acute Alcoholic Hepatitis
- 648.3 Drug dependence complicating pregnancy

Infant Diagnoses Indicating Probable Substance Abuse by the Mother During Pregnancy

- 760.71 Fetal Alcohol syndrome
- 760.72 Maternal Narcotic affecting newborn
- 760.73 Maternal Hallucinogen affecting newborn
- 760.75 Maternal Cocaine affecting the newborn
- 760.79 Other toxic substances
- 779.5 Newborn drug withdrawal syndrome

Appendix F: Definition of Completion Rates in SAMS

Information on discharge status was determined for each modality of treatment. Treatments with a discharge status of "deceased" or "inappropriate admission" were dropped from the analysis. A treatment was considered completed if the discharge status was "completed" or if the discharge status was "transferred to another program" and the length of treatment met one of the following criteria: over 60 days in a recovery house; over 180 days in a long-term residential program; over 21 days in intensive inpatient program; or over 90 days in outpatient program. Treatments with a discharge status of "transferred" that failed to meet these time criteria were considered non-completions. If a woman had more than one treatment episode of the same modality and she completed one of those treatment episodes, then she was considered to have completed that modality of treatment. Women with other discharge statuses, including those with no specified discharge status, were considered to be non-completers. The criteria used to define completion in this report were adapted from those used by Wickizer and Maynard (1992).

Appendix G: Treatment Paths

Treatment paths were constructed for the 1824 women described in Part 2 of this report. These treatment paths contain information on the movement of women from the first to the last treatment modality that they entered into during their pregnancy or the year postpartum. Each modality is represented by two letters: DT = Detox; II = Intensive Inpatient; IO = Intensive Outpatient; LT = Long Term Care (Recovery House, Long Term Care, or Extended Care); MT = Methadone; and OP = Outpatient. A path such as DTIIOP indicates that a woman went from Detox to Intensive Inpatient to Outpatient.

<u>PATH</u>	<u>N</u>	<u>PERCENT</u>
<u>Women Starting in Detox</u>		
DT	17	0.9
DTII	5	0.3
DTIIDT	2	0.1
DTIIIO	1	0.1
DTIIIOOP	1	0.1
DTIILT	1	0.1
DTIIOP	7	0.4
DTIIOPIIIO	1	0.1
DTIO	4	0.2
DTIODT	1	0.1
DTIOOPLT	1	0.1
DTLT	1	0.1
DTLTDTLTIO	1	0.1
DTLTILT	1	0.1
DTLTOP	1	0.1
DTOP	6	0.3
DTOPDTLTDT	1	0.1
DTOPILT	1	0.1
DTOPLT	1	0.1
Subtotal	54	3.0

Women Starting in Intensive Inpatient

II	52	2.9
IIDT	4	0.2
IIDTIO	1	0.1
IIDTLT	1	0.1
IIDTLTDT	1	0.1
IIDTOP	1	0.1
IIIO	7	0.4
IIODTHIOP	1	0.1

<u>PATH</u>	<u>N</u>	<u>PERCENT</u>
IIODTLTOP	1	0.1
IIODTOP	1	0.1
IIOII	1	0.1
IIOLT	1	0.1
IIOOP	8	0.4
IILT	8	0.4
IILTDT	1	0.1
IILTIIITOP	1	0.1
IILTIO	2	0.1
IILTOP	23	1.3
IILTOPIIOP	1	0.1
IILTIOIO	1	0.1
IIIT	1	0.1
IIOP	73	4.0
IIOPDTOP	1	0.1
IIOPII	5	0.3
IIOPIIIT	1	0.1
IIOPIO	5	0.3
IIOPIOIIOP	1	0.1
IIOPIOOP	3	0.2
IIOPLT	3	0.2
IIOPLTDT	1	0.1
IIOPLTH	1	0.1
IIOPLTHILT	1	0.1
IIOPLTIO	1	0.1
IIOPLTIOOP	1	0.1
IIOPLTOP	1	0.1
IIOPLTOPDT	1	0.1
Subtotal	217	11.9

Women Starting in Intensive Outpatient

IO	308	16.9
IODT	4	0.2
IODTH	3	0.2
IODTHIITOP	1	0.1
IODTIO	1	0.1
IOII	14	0.8
IOHIO	4	0.2
IOHILT	2	0.1
IOHILTHILT	1	0.1
IOHOP	9	0.5
IOHOPDTLT	1	0.1
IOLT	9	0.5
IOLTDTH	1	0.1

<u>PATH</u>	<u>N</u>	<u>PERCENT</u>
IOLTDTHILT	1	0.1
IOLTIOOP	1	0.1
IOLTOP	1	0.1
IOMT	1	0.1
IOOP	88	4.8
IOOPDT	1	0.1
IOOPII	2	0.1
IOOPIO	2	0.1
IOOPLT	2	0.1
IOOPLTOP	1	0.1
Subtotal	458	25.1

Women Starting in Long-Term Care

LT	32	1.8
LTDT	1	0.1
LTDTLTOPDTOP	1	0.1
LTH	1	0.1
LTHOP	3	0.2
LTHOPLTOP	1	0.1
LTIO	7	0.4
LTIOOP	1	0.1
LTMT	3	0.2
LTOP	34	1.9
LTOPDT	1	0.1
LTOPII	1	0.1
LTOPIILTOP	1	0.1
LTOPIO	4	0.2
LTOPIOOP	1	0.1
LTOPLT	1	0.1
Subtotal	93	5.1

Women Starting in Methadone Treatment

MT	82	4.5
MTDT	6	0.3
MTDTH	1	0.1
MTDTHIDT	1	0.1
MTDTHIOP	2	0.1
MTDTIOHMT	1	0.1
MTDTLT	1	0.1
MTHILT	1	0.1
MTIO	1	0.1
MTIOLT	1	0.1

<u>PATH</u>	<u>N</u>	<u>PERCENT</u>
MTIOOP	1	0.1
MTLT	6	0.3
MTLTMTDT	1	0.1
MTLTOP	2	0.1
MTOP	2	0.1
MTOPMT	1	0.1
Subtotal	110	6.0

Women Starting in Outpatient

OP	723	39.6
OPDT	7	0.4
OPDTII	4	0.2
OPDTIILTOP	1	0.1
OPDTIIOP	4	0.2
OPDTLT	1	0.1
OPDTOP	1	0.1
OPII	31	1.7
OPIIDT	1	0.1
OPIIO	6	0.3
OPIIOLTD	1	0.1
OPIIOOP	1	0.1
OPIILT	3	0.2
OPIILTOP	1	0.1
OPIIOP	8	0.4
OPIIOPII	2	0.1
OPIIOPILTIO	1	0.1
OPIIOPIOOP	1	0.1
OPIO	48	2.6
OPIODT	1	0.1
OPIOII	3	0.2
OPIOIIOP	1	0.1
OPIOLT	1	0.1
OPIOLTOP	1	0.1
OPIOOP	5	0.3
OPIOOPIO	1	0.1
OPLT	19	1.0
OPLTDTOPDT	1	0.1
OPLTH	1	0.1
OPLTIO	2	0.1
OPLTIOII	1	0.1
OPLTOP	6	0.3
OPMT	4	0.2
Subtotal	892	48.9

